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THE PHILOSOPHY OF ART.

THE PERSONALITY OF ART .- In this essay, the word Art is not used in the most limited sense, that of the Formative Arts (Architecture, Sculpture, Painting), nor only, in the more extended sense, to include the Literary Arts (Language, Poetry, Music). Art is here conceived to comprise, beside these, the Social Arts, which are Philosophy, Religion, Government, from which the literary and formative arts derive their inspiration and their universal ideas, and to which they contribute material of more external and individual species. It is conceived that these three regions of art—the social, the literary, and the formative—constitute the personality of art, the spirit, the soul, and the body of its organization, presenting analogies to the human person, to man as constituted of spirit, soul, body-of Spirit or Mind (which is the sphere of universal consciousness-activity-life), of Soul, including Will (the sphere of individuality, the Ego), and of Body, the physical constitution (the sphere of material consciousness-activity-life). In this unified personality of art, the social arts govern the literary and formative arts, furnish them with general principles and ideal subjects for incorporation, and give to them a higher life and significance; while the lower arts contribute, to the higher, material for the incorporation and expression of their ideas on lower planes of thought. Through this personal constitution, there is, in artistic periods of Society, throughout the entire social organism, a complete permeation and circulation

of universal ideals, which constitute the vitalizing and unifying principles of the civilization of the period. This harmony and cooperation of the arts extends from philosophy to painting; and their comparative study under the light of analogy is one of the most fruitful sources of knowledge as to the ideal significance of the lower arts; for it is in the higher arts, where thought is expressed in language, that we are to find the clearest and most distinct presentation of the psychologic principles and the general ideas which rule and govern all original production in any given epoch, all that constitutes its creative work of inspiration and genius, as distinct from mere imitation, fantasy and reproduction. This integral unity and communion among the arts, arising in the presence of common sociologic principles and norms of civilization, establishes a most intimate family relationship between the arts of any given period, and makes them all contribute to the expression of a common social ideal. This is seen most clearly among artistic peoples and in the constructive periods of society, when the artistic nature is developed on all planes of the consciousness. One of the clearest examples of this is found in Greek civilization, which was artistic and ideal from top to bottom; and presented an intuitive experience of, and a self-sacrificing devotion to, universal social principles paralleled only by the early Christians in their complete surrender to religious ideals, and by the Hebrews and by the medieval Christians in their devotion to theocratic civilization.

PLACE OF ART IN CIVILIZATION.—Civilization personifies human experience in the tri-individuality of Art, Science, and Industry, which constitute the spirit, soul, and body of civilization, and cover the whole ground of man's intelligent production and occupation. Art, as the spirit of civilization, is the highest agent in the development of human consciousness-activity-life; it is either regenerative or degenerative, as it is the exponent of truth-good-beauty, or of falsehood-evil-deformity.

Art occupies that department of human thought and activity which relates to the discovery of the ideality of existence and the laws of the mental universe, and to the incorporation of this knowledge in sensible forms for the sake of the ideal principles which these forms signify and contain, and for the purpose of

communicating these ideal principles to man for use in his mental life and development, and in his relations with other minds. Art is thus distinguished (1) from Science, which investigates the physical universe in the acquisition of knowledge for practical use in the subjection of nature to man; (2) from Industry, which works for the sake of material utility, and as the means of livelihood, in the cultivation, organization, and distribution of the products of the material universe.

Art is, therefore, the highest individuality in that objective world which we call Society or Civilization: it is its spirit, its universal and ideal entity. It is constructed through the human consciousness in opposite ideals, and operates upon this consciousness in its development by regeneration and by degeneration. It involves the operation of the entire human mind from the highest to the lowest of its faculties, from their highest (supernatural) to their lowest (material) condition, and from both constructive and destructive points of view or genera of ideal. In every period of civilization art projects, in sensible and individual form, those universal ideas which rule in this period; and this externalization aids the internal development of the mind by the multiplication of particular forms incorporating these ideas in the various interrelated arts, from philosophy, the highest, to painting, the lowest. Thus, a general ideal will find expression in the greatest variety of forms which appeal to the entire organization of the mind. from the Reason and the Sentiment to the lowest forms of Intellect and Affection, Sensation and Instinct. This ideal will rule in the formation or modification of ontologic principles and the form of Philosophy, of religious principles and the form of the Church, of moral and political principles and the form of the State, of the principles of cognition and the form of education, of the domestic principles and the form of the family, of economic and industrial principles and the form of individual occupation and the conduct of life. This universal ideal thus circulates through the whole social fabric and the consciousness and life of man, constituting the causative agent in the history of any period.

DISTINCTION BETWEEN ART AND NATURE.—From claiming for art this high character and position, it is clear that we hold art to be

a product of man's creative intelligence, and oppose that view which sees in art nothing but an imitation or copy of nature: the latter view would take away from art all reason to exist, would ignore all genius or creative power, all originality of conception, all possibility of progress in the race. The fundamental reason why art is not a copy of nature is, that concrete nature presents opposite ideals, laws, and phenomena in confusive conflict, and that it is one of the most important functions of art to separate, individualize, and distinctly present the opposite ideal realities which are behind the sensible appearances, in order to correct the deceptive and confused appearances of this nature, and to use them in the representation of the ideals of the mind. In every work of art, from landscape-painting to philosophy, nature is -used as material, but only as it is transformed into artistic unity with the ideal in the mind of the artist, which is the primary ground and cause of the work of art; and the art consists in the reality of this incorporation of the ideal in actual form so as to express it by means the most clear, simple and direct; whether it be an ideal of beauty or deformity.

Even in landscape-art, which is one of the lowest forms of art, it must be claimed that art is higher than nature by reason of the addition of the element of mind, which raises the work of the artist above the mindless nature which is suggestive to him in his work, and furnishes him with external material. Every work of landscape-art is an ideal composition in both form and color. In many cases, the exact reproduction of the form and especially of the colors of nature would be ludicrously inartistic. artist, who takes a subject from nature, reconstructs it into artistic form and color, rejects non-essential elements, using only such parts as aid in the clear presentation of the ideas which this natural scene or object is used to express-because everything that does not aid in this artistic expression is an obstacle, an impediment, and must be removed from the work of art. If it be a work of beauty and congruity (even if it be only picturesque), all features that interfere with, and those which do not aid in, the symmetrical proportion of the parts and between the form and the idea must be either discarded or reconstructed. This applies to all works of art, from philosophy to painting-it is an artistic

dogma. What does a mere imitator or copyist know of such creative work, or those who think, with him, that copies of nature are works of art? Nevertheless, many an artist, unconscious of his mental process, will think that he is copying nature, when nature is merely suggestive to his creative faculty.

PHILOSOPHY OF ART.—The philosophy of art deals, primarily, with the opposite principles of reality, which are the archetypes of relative existence; secondarily, it deals with the works of art which really represent these primary principles in persisting typical forms of thought: all the rest of pseudo art-work belongs either to industry or to the rubbish-heap of art; and it is by far the greater part of so-called art that belongs there, as the waste always present in the natural world. Æsthetic Science should present art in both its theoretic and its practical aspects, and offer a conception of the principles of art (both objective and subjective) which may be useful in the interpretation of its phenomena. It should comprehend (1) a statement of the ontologic archetypes of æsthetic principles * and their psychologic types in the human mind; (2) a definition of art, and a conception of its place as a factor in civilization; (3) a conception of the genera and species of art-ideals, which are the psychologic causes in the construction of its works-including a statement of the classes and species of ideas for which we are to look in works of art, and a conception of the faculties of the mind by which these works are constructed and appreciated. (4) Æsthetic Science must present laws of classification and of the historic development of art which shall be a guide in the comparative study of its generic and specific ideals, of its particular examples, its schools, and its historic periods; recognizing the validity of every species of art that persistently reproduces its kind, and is therefore to be included in the history of art. The philosophy of art should conceive the different art-ideals, present their distinctive character and actual operation, and estimate their relative value according to a universal ideal standard, and by this means give to the observer a

^{*}The ontologic foundation of Beauty and Deformity in primordial Being and Nonbeing is presented in Parts I and II of Christian Philosophy (Princeton, A. L. Frothingham, publisher), and reference to these chapters is necessary to the comprehension of the ontologic basis of the Philosophy of Art.

universal and disinterested point of view from which to judge and characterize the varied multitude of its works: it should teach him how to look at works of art from a point of view above the conflict of different ideals and the limitations of his personal preference, and thus to guard against the evil influence of false and immoral art.

The Philosophy of Art must reach the heights above these contending ideals and show the natural relation and succession of these types of thought in the human mind and in the order of human society. It is only by this means that thought can be redeemed from the chaos of conflicting ideals, from the limitations of a partial standpoint and the deceptive judgments of individual opinion and preference, from the instability of an everchanging free-thought or pseudo-rationalism and the seductive gratification of free-feeling or licentiousness which is associated with it. Such help is much needed at the present time, when the use and study of art are becoming so general, and when the old authorities and landmarks of judgment and of taste are disregarded by the larger number. Confusion and license reign over a democratic civilization of exaggerated individualism, which seeks only pleasure, and too often finds it either in a vicious sensationalism and meretricious realism, or in a fanciful and effeminating idealism; by which the artist satisfies both the licentious taste that demands the production of such works and the commercial motive, which too often leads him to give rein to his technical power in the production of works that conform to an anti-Christian, an immoral, or a fantastic standard.

Writers on art usually write from some partial point of view, expressing some prejudice or preconception. Works on the philosophy of art are more often written in the interest of an individual philosophic ideal, and quite apart from any experience of works of art or any ability to realize them; sometimes they are written from a fanciful or fantastic experience. Histories of art and essays are written at best from a very external point of view, and to support some personal prejudice; often according to a simply literary method which enables the intellectual artisan to write about everything, as well without as with any real knowledge of the subject. The most common historic method is to

regard the great bulk of works of art as unsuccessful attempts to attain the type which the writer or his time prefers; instead of concluding that every species of art that persistently reproduces its kind is to be included in the natural history of art, and that it is the business of the real investigator to study every kind, and to attempt to conceive what psychologic cause and condition led to its production-to conclude that it had a meaning and try to find out what it means; not, because he does not understand it and does not like it, to attempt to brush it away with the cheap phrase of a partial standpoint: "It was a failure; they thought that they thought, but it was not thinking." This point of view recognizes the validity of only that species which is individual to it, being utterly lacking in that universal and artistic faculty of the mind which is able to conceive a more or less extensive group of species quite beyond the limitations of the individuality of the person.

It is not a real philosophy of history (but asophy or foolishness) which leaps from Aristotle to Descartes, from Origen to Schleiermacher and Hegel, from Euripides to Dante, from Praxiteles to Donatello, from Apelles to Raphael, from the age of Pericles to the Renaissance of Paganism of the fifteenth century. It is a Pagan consciousness which claims to do this, ignoring Christianity and Christian civilization. This standpoint is either unable to perceive and realize, or is antagonistic to, the social principles and historic laws of the Christian era. A philosophy of history cannot claim to exist unless it explain the Christian era as a part of history, and even explain the distinct periods and successive ideals of this era.

The time is past when people of true culture could claim to reject any historic species of art because it failed to correspond with a current ideal or with the limitations of the individual preference. Neither æsthetic science nor true taste can be founded on a temporary ideal and the taste of the time; or on the authority of individual opinion, taste, and preference; or on spontaneous and unreasoning judgment—no matter how innately artistic or highly refined and cultivated may be the individual nature.

Neither can æsthetic science be founded on theory alone, no matter how wonderful it may be, either in words or in ideas. A

theory which transcends the actual world of art, and separates itself from actual human consciousness, is without reason to exist. Science, in order to exist, must be founded on a rational synthesis of ideality, reality, and actuality: it must explain the facts, and all the facts, of art-history; it must show art to be integral to civilization, as well as show the relation of art to the manifestation of the integral principles of the mind: all this it must do, or it is not science but nescience.

History shows us that, in the development of a people, the prevalence of an advanced culture in the literary and formative arts has been attended or followed by national and individual degeneration — a degeneration of social institutions, of mental standards, and of individual character, accompanied by luxury of life, laxity of morals, and effeminacy of manners. In other words, history shows that the refinement produced by or attending an advanced æsthetic culture is enervating and unhealthy, is an evil, not a good, and is followed by a rapid degeneration in all the arts. This observed fact has appeared to furnish a ground for the opinion that art is integrally bad, and that its entire influence is to be characterized as demoralizing—an error arising in the inability to separate between its opposite generic principles (between sublimity and the horrible, between beauty and deformity, between the picturesque and the grotesque); and in the failure to distinguish its higher from its lower ideals and standpoints of consciousness, and to attribute to each its specific individuality and mental value.

It has become usual to contemplate art as having qualities of only one genus, as being the exponent of beauty alone; in fact, beauty and art are used by most writers of the day as equivalent terms. Art, therefore, is claimed by them to be intrinsically elevating and purifying in its causes and effects; and the prevalence of æsthetic culture, even in its merely technical and decorative forms, irrespective of the ideas involved in it, is by many held up as the highest good. We purpose to show that art may be and has been corrupting and debasing, as well as purifying and elevating; that destructive and demoralizing principles and ideals, as well as those which are constructive and moral, are to be found incorporated in art; and that, in certain epochs, these destructive

principles and ideals are to be seen operating, as degenerative social causes, in all the arts from philosophy to painting, and in all departments of human consciousness—the religious and moral, the intellectual and affectional, the social and domestic, and even the industrial.

History shows us that the general ideal of each period appears first in the philosophic or social arts (Philosophy, Religion, Government), passes into the literary arts or arts of expression, and finally becomes incorporated in the formative arts or arts of design. Consequently, degenerative formative and literary art is but the expression of degenerative social principles in philosophy and religion and politics already established in power, and at work in the attempt to found destructive civilization.

The original ideal of any epoch, as distinguished from its inherited ideals and its reproductive and imitative experience, constitutes the productive principle of the new spirit which every age has, though the greater part of the work of the age be merely imitative or reproductive. In order, then, to judge of the original work of any epoch, of any new departure (that which makes its significance), we must first determine the nature of the artistic principle and creative psychologic agent at work in this production; and this will show on what road this epoch is advancingwhether it be the road of health and regeneration, or the road of disease and degeneration: for there are but these two roads of The fact that any system of ideas prevails throughout a community—is active, militant, profusely productive—does not prove that these are manifestations of healthy mental activity. Evidences of disease and degeneration, especially if these be deeply seated, do not readily show themselves to casual or external observation: it is only by philosophic analysis of the internal principles at work as the mental causes of the artistic effects, that we can penetrate below the surface, and get at the real social significance of any period.

We claim, then, that art, like everything else in this world, has its false-evil-deformed genus as well as its true-good-beautiful genus (both being real art), and that the constructive Reason and Sentiment are continually calling on us to reject the false-evil-deformed, and to choose the true-good-beautiful. A trusty

guide to aid in this choice is especially needed to controvert the delusive assertion of that school of writers on art who proclaim the false gospel of "art for art's sake," started in our century by Schiller, and perverted by his sensual followers, who would separate art from morality - often for the purpose of infusing into artistic forms an immoral content. With Schiller (Æsthetic Letters, XXII) it was a philosophic dogma, that by the form the master abolishes the subject. The sensual school of writers identify the technical element with art, and claim that the artistic technical form, irrespective of its ideal content, ranks the work of art as a cultivating agent, and that the false and evil ideal content is to be either accepted or ignored by the cultivated for the sake of the art-technique, which is really the material element This leads them to defend the artistic theatre as a wholethe moral or immoral content does not count; culture looks only at the artistic technique of origination by the author and of interpretation by the actor. This position leads to the defence of technically artistic fiction, even if it present the realism of beastly humanity, artistic sensualism, and deviltry of all sorts. It leads to the defence of the representation of nude physical beauty, on the ground that what is not permitted in actual life, may be represented by realistic art, and redeemed from the evil of sensualism by the purifying influence of art.

A philosophy of art is needed also to refute the claims of the ideal school of the horrible, of deformity, of the comic and the grotesque, which correlative aesthetic principles it would substitute for and identify with their opposites, sublimity and beauty and the picturesque. This school would make itself to be a social regenerator instead of a degenerator, and would call itself true because it is real. Finding in humanity this idealism of imperfection, it claims that to represent it realistically is to produce an art that is a true elevator of the race—thus following the ideal reasserted in our time by Goethe, which would regenerate and save man through the experience of evil. If evil were always clad in garments of darkness and deformity, it would be easy to detect; but the most dangerous attacks of evil on human virtue are insidiously made under the stolen garments of light and beauty, and one has to learn to detect the internal and ideal deformity and

immorality of the most seductive forms of sensual beauty, which appeal to our defective human nature, and offer gratification to its evil desires under forms which have been accepted in the so-called good society of the epoch. In every individual there are a mother Eve and a father Adam ready to be seduced by the serpent if he be clad as an angel of light. The temptation of a seductive charm is addressed to inborn sensualism; and, if not guided by reason or by true forms of sentiment, the soul is in danger of yielding itself to the sensual-beautiful, the seductive Circe of art, which changes its lovers into swine.

The personal-psychologic question with regard to a work of art becomes: Does it elevate the mind or edify the soul? Not, does it suggest new thought? but, is this thought constructive or destructive, is it elevating or degrading? Not, does it profoundly affect the feelings? but, what is the quality of the feeling excited? Works of art are too often estimated by the amount of originality and talent they show, by their psychologic intensity and effect on the feelings through sympathy; instead of being judged by the quality of the experience and by the relative value of the faculty of the mind and the emotion of the soul to which they appeal.

If human nature were perfect, harmonious in its want, unitive in its life, natural selection by instinctive want might be a true law of life; though, even in that case, it would be true only by union with and subjection to true reason. But human nature is imperfect and discordant, has affinities for both truth and falsehood, for both good and evil, for both beauty and deformity-has capacities for degradation as well as for elevation, and is always moving in the one direction or in the other. Furthermore, in many natures (from both heredity and environment) the affinity and capacity for falsehood-evil-deformity is more powerful than that for truth-good-beauty-in some cases even has possession of the nature. We must therefore insist on rational judgment versus feeling; for, though feeling may suggest the want or inclination, reason must determine whether it be a constructive or a destructive want that claims to be gratified. When, as the law of life, natural selection by instinctive want takes the place of the judgment of the reason, the dictates of religious and moral sentiment, and the conscious choice between right and wrong principles, the individual is obeying the command of a spontaneity which may be the destroyer of his life. We are familiar with the destructive manifestation of the nutritive and sexual instincts, which, by their unbridled gratification, destroy so many physical natures, but we do not so readily recognize the destructive power of that craving for literary and social stimulants which destroy the vital functions of the mind and will by a more subtle and deeper way of working.

True appreciation of art can exist only when the judgment is guided by a real knowledge of the artistic principles which operate in the production of the forms of art, and by a knowledge of the laws which regulate its history. This guide is æsthetic science, or the philosophy of art. This science must be comprehensive in its field of vision, and should ascend above the limitations of individual preference to a universal and disinterested point of view from which to characterize, classify, relate, and explain all those types of art which have vindicated their right to exist and their psychologic relation with man, by their establishment and historic succession, as the embodiment of the æsthetic consciousness and productive power of their epoch. This science must teach us to qualify and distinguish each one of the principles of art: to distinguish Sublimity from its opposite, the Horrible or Terrible, Truth-Good-Beauty from Falsehood-Evil-Deformity, the Picturesque from the Grotesque, so that we may detect the presence of these principles in works of art, and see into the real nature and psychologic significance of the representation by getting at its ideal content. It must teach us to separate these generic principles of artistic reality into their opposite spheres of ideal causality, and to recognize the specific limits and boundaries of the distinct principles in each of these opposite spheres: placing on one side the constructive principles of art, Sublimity, Beauty, the Picturesque, which constitute the spirit, the soul, and the body of constructive ideality, and include the ideas of congruity and unity, law and order, harmony, rhythm and repose, grandeur, simplicity and purity, wisdom, love and constructive power; and placing on the opposite side the destructive principles of art, the Horrible, Deformity, the Grotesque, which constitute the spirit, the soul, and the body of destructive ideality, and

include the ideas of incongruity and diversity, lawlessness and chaos, discord and monstrosity, duplicity, obscenity and meretricity, guile, hate and destructive force. It must recognize the intimate relation (both normal and abnormal) between Sublimity, Beauty and the Picturesque, as coöperative principles in constructive art (as well as the perverted forms in which they appear in epochs of decline), and the intimate relation between the Horrible, Deformity and the Grotesque, as coöperative principles in destructive art, which includes all those forms of Tragedy and the Horrible, and of Comedy and the Ludicrous, which are shown

to be the product of cooperative æsthetic principles.

Æsthetic science must teach us, also, to recognize the different art-ideals which originate in different classes of human consciousness and conceptions of primary causality, and constitute distinct points of view, under one of which every work of art is to be classified, because this ideal characterizes its significant content, and the ideal point of view under which the artist worked in his construction of it. We must distinguish the point of view from which the ideal of Deformity is presented—whether from its own standpoint or from that of Beauty. That art which presents Deformity from its own standpoint is destructive, because its point of view is false and evil-it knows neither itself truly nor its opposite Beauty, but identifies itself with Beauty. That art which presents Deformity from the standpoint of Beauty is constructive, because its point of view is true and good-it knows itself, and sees and truly knows its opposite, Deformity, which it presents in all its detailed opposition of falsehood-evil-deformity. The art of Beauty sometimes presents itself alone, sometimes presents itself and its opposite, Deformity, but for the purpose of separating it from Beauty, and presenting Beauty and Deformity as opposite ideals. We see this in all dualistic systems of theology, in the Bible, in early Christian art, in the epics of Dante and Milton. In the history of Christian civilization, the ideal of Deformity has gained power in the domain of art, and the ideal of Beauty has become perverted and finally denied by a monistic idealism, founded on Deformity, which reigns in art from Philosophy to Painting, in the incorporation of the

æsthetic principles of horrible and grotesque Deformity, coöperating with a perverted naturalistic and materialistic beauty.

The philosophy of art is not in the interest of theoretic truth alone, but is also a practical guide in the affairs of life. It furnishes a basis for historic judgment of the social principles at work in all periods of civilization, it being impossible to interpret history without a knowledge of the ideal principles which are the psychologic causes in its production. It is necessary as a guide in the separation between opposite orders of art—between the art which is true and constructive, elevating and purifying, and the art which is false and destructive, depraying and corrupting. It aids to controvert the different forms of destructive thought: (1) it controverts the technic school of sensual realism, whose motto is "Art for art's sake," and who would make art consist in perfection of technique, which is made to cover a multitude of sins in the ideal content; (2) it controverts the false gospel of the pessimistic and nihilistic-supernatural ideal, which is the destructive factor in civilization; (3) it controverts the current pantheistic, naturalistic, and material theories of philosophy and religion and politics, which dominate all forms of art, especially the claims of the critical, logical and pseudo-rational intellect in its assertion of the natural ideal, and the claims of the realistic and technic intellect in its assertion of the material ideal; both of which combine with the destructive-supernatural ideal in a common enmity to Christian Theism and the constructive-supernatural ideal of Christian civilization.

ÆSTHETIC DUALISM.—The chief obstacle to modern æsthetic science is that it has been founded on a monistic philosophy, and therefore recognizes Beauty to be the only art-principle, attempting to explain all kinds of art as momenta or determinations of this one principle—Beauty. The evident presence, in works of real art, of deformity or ugliness, of the horrible, and of the comic or ludicrous, has led German theorists of our century, and their followers, to the monstrous conclusion that ugliness, the terrible, and the ludicrous, together with the beautiful, are particular manifestations or successive momenta of a pseudo-universal principle of beauty. This recognition is not from the point of view of a merely superficial inconsistency, but is in the interest of a

false idealism, which aims to confound opposite ideas and things in a principle of chaotic identity—the principle which is at the basis of false idealism in all ages. These theorists are preternaturally blind to the proposition, so clear to ordinary minds, that a principle which evolved such opposites as the beautiful, the deformed, the terrible, and the ludicrous, could not be named Beauty, neither could they be defined under any one term, for even the word Identity implies and involves the opposites identified.

That all art is not the art of Beauty will be seen by the slightest reflection on æsthetic law. Beauty is the symbol of unity and harmony and order, and it demands Congruity as its law-symmetrical proportion and consistency among the ideas represented and between the elements of the art-form, as well as between this form and the ideal to be signified and expressed by it. But there is also an art of Deformity that is the symbol of diversity and license and chaotic discord, which demands Incongruity as its law—unsymmetrical proportion and inconsistency between the parts of the art-form and between the ideas expressed and the form of expression, as well as an incoherence and distortion and absurdity in the ideas themselves—such is the art of the Horrible and of the Comic. Discord and license and disorder rule in this art of Deformity, and constitute its very being; and this lawless art is so predominant that it is quite usual to characterize all art and all beauty (which are treated as equivalent terms) as the child of a so-called free but really licentious fancy.

The most casual observation of its works'shows that art is not the representation or manifestion of beauty alone; in fact, it is oftener the representation of deformity, either side by side with and opposite to beauty (in the same work) or as a sole ideal; and it is usually the deformity that is the more real, and therefore the more artistic. The tragedies of Aischylos and Shakespeare, are they not art? The Inferno of Dante and of Milton, of Jakob Böhme and of Swedenborg, of Luca Signorelli and of Michel Angelo, the Medusa of Leonardo da Vinci—they surely are art; but who could say that they are representations of beauty? It is the reality of their representation of spiritual deformity, death and disorder, depravity and hate that makes them great works of art; and as such they are opposite to beauty, the essence of which

is spiritual life and order, purity and love. The value of these great works of art consists in their artistic reality, in the complete success attained in the incarnation of their idea; not in beauty of idea, for the ideas thus presented with artistic reality are ideas of deformity.

It is the same with that realm of art which is so intimately related to the imperfect side of our nature—the Grotesque, the Ludicrous, the Comic. It is real art, but it is founded on the law of incongruity, of falsehood-evil-deformity, and so often appeals to our enjoyment of obscenity and meretricity, of double entente and violent contrasts, as we see them in the great works of Shakespeare and a host of artists of the same type. All this art comes under the law of Deformity, for it is opposite to the congruity, simplicity and purity, the grandeur and elevation which belong to Beauty. In the art of painting, we might cite the Early Dutch School, which presents, in its greatest masters, examples of vulgar obscenity and meretricity, executed with complete mastery of idea, form, and color. This is an art which "holds up the mirror" to the vulgar, obscene, and meretricious type of human nature with a reality and mastery equalled only by some of Shakespeare's most famous comedies; and it gives a much clearer expression of ideal Deformity than do the nudities and refined meretricity of idea of the French School of our time and its imitators, which work from the same æsthetic principle.

It is, therefore, not science, but confusion of thought, to say, as do many German philosophers, that the horrible and the sublime, the ugly and the beautiful, the satirical and the ridiculous, are momenta or particular forms of a pseudo-beauty—such a statement is of the extremest irrationality, and is impossible to true thought. It is like saying that evil is a particular form or manifestation or momentum of good, falsehood of truth, the infernal of the divine; that the Devil is a particular form of God, darkness of light, death of life, etc. Some writers are so vague in their thought, and some are such devotees of confusive thought, that they cannot see that artistic reality in the presentation of ideas of deformity does not constitute beauty, and they therefore rank such works as phenomena of beauty. A good psychologist should at once recognize the opposition between the ideas of Beauty and thos

of Deformity from the opposite nature of his own experience, because opposite ideas appeal to opposite faculties of the mind and opposite emotions of the soul, and, in general, produce opposite conditions of consciousness. Ideas of Sublimity and Beauty elevate and expand the mind and soul to their highest possibilities of experience: ideas of Horrible Deformity depress and paralyze the mind and soul with terror: ideas of Grotesque Deformity (including Wit and the Ludicrous) appeal to the lower side of our nature, contract the mind and soul to their lowest possibilities of experience, and excite to conscious activity its (perhaps) dormant depths of imperfection.

The subjective testimony of our nature proves the existence of these opposite genera of art. We perceive within us two naturesone, the perfect side of ourselves (the angel in us), to which appeals the art of Beauty and Congruity, of purity and simplicity, of elevation and grandeur and repose, of creative wisdom and love and power: the other nature, the imperfect side of ourselves (the demon in us), to which appeals the art that presents the terrible and destructive forces of supernatural existence, of man, and of nature, the art of Deformity and Incongruity, of Wit and the Ludicrous, with their false and impure and malevolent ele-The Dionysiac and Erotic phrenzy, the Silenic and Satyric beastliness, represented in Greek sculpture and vase-painting, cannot be denied artistic reality in a directness of representation of the ideas of deformity and grotesque. We deny the assertion, that Greek art was characterized by beauty alone, with its attributes of harmony, serenity, repose, purity and simplicity, because Greek art and all art is subject to the law of duality of ideal, and the law of historic degradation. The Greek consciousness was in an especial manner dualistic, as was the idealism of all antiquity: the religion of Babylonia and Egypt, of Assyria, Persia and Greece, and all polytheistic religions, divided their divinities into opposite camps, the supernal and the infernal, and their art, being founded on this dualistic theogony, represented opposite ideals and psychologic attributes. The constructive and theistic period of Hellenic civilization is distinctly dualistic. We find opposite orders of mythology and divinities, opposite art-ideals and types of social law, even opposite Greek races, as permanent representatives of these types. It is in the scientific and humanistic period of Hellenic history that the monistic principle appears and produces that confusion in myth and art-type of divinity, that inversion of ideal content and confusion of opposite ideals, which characterize all degenerate and destructive periods; presenting the same succession of types of consciousness that we see in Christendom.

If we recognize Sublimity and Beauty to be real æsthetic principles and causes of artistic production, the recognition of artistic duality is a necessary consequence: that is, we must recognize Deformity as a real principle of art and cause of artistic production. Deformity is not defective Beauty, it is the opposite to Beauty. Beauty, with its inseparable elements Truth and Good, cannot alone be the agent in art, as we find it, including as it does the Horrible, the Deformed, the False, the Evil, the Impure, the Grotesque, the Comic, the Ridiculous. If the universe of art be conceived to be produced or governed by one principle, and that the principle of Beauty and Perfection, there would be nothing in art (from Philosophy to Painting) but Perfect Unity, Symmetry, Order, Sublimity and Beauty. The very idea of Beauty is contradicted by conceiving it to include implicitly its opposite, Deformity, and all its servants of imperfection, which in certain periods are the agents in the bulk of artistic production. If any principle or entity be conceived to evolve its opposite, it cannot be truly named; for its definition should include the possibility of this evolution and the primary qualities of the thing evolved. If the Sublime can evolve the Horrible, or Beauty can evolve Deformity, either by diminution, defect, absence, privation, or as its manifestation, self-revelation, actuality, or as one of its momenta, then what is termed sublimity and beauty is falsely named, and the posit is denied by its own implication. The art of real Beauty is always true and good, and true art is always good and beautiful. Where truth and good are found, beauty must be present as the higher and constructive third. Some writers have made the artificial distinction between truth and beauty, that Science is the exponent of truth, and Art of beauty; but the truth of Science is of an order different from the truth of Art; and it is either a licentious or a fictitious beauty that has not truth for its co-worker.

Every work of art, as the condition of individuality, must include as its ideality either the co-active unities, truth-good-beauty, or the co-active diversities, falsehood-evil-deformity. tri-une idealities are spiritual opposites, we cannot, in any work of real art, find them combined in a mixed form. A pseudo-beauty which is not true and good must belong to the art of deformity. A work of art with an immoral idea is deformed, whatever false garment of the beautiful it may put on—it is deformity in beauty's perverted form, which makes the falsehood worse because more deceptive. A principal reason for error on this point is the misconception of truth by identifying it with reality; whereas falsehood-evil-deformity are as real as truth-good-beauty: they are opposite realities, and nothing in art, from philosophy to painting, can be really understood without knowing this reality of opposites, and applying the knowledge in the interpretation of phenomena. In all the works of the Most High, "Life is set against Death, and Good is set against Evil," for He placed, in the creation, images of death and evil as well as images of life and good, so that the invisible nonentities of the Not-god might be understood by the things that are made, as well as the invisible things of "His eternal power and Godhead"; for Jehovah created darkness and evil as well as light and peace (Isaiah).

In this probationary state of existence man is called upon to choose which ideal he will serve. He must serve, but he cannot serve two masters; and these opposite masters are offered to him with the command: "See, I have set before thee this day life and good, and death and evil;" "choose you this day whom ye will serve." This duality of masters obtains in the other forms of art as well as in Religion, and we must be able to intelligently distinguish and choose between them. If one choose for his master (with eyes open and for indulgence of personal inclination) the prince of darkness and sensuality, let him acknowledge that such is his act, and not pretend to see, in the deadly and sensuous images of Satan, the likeness and image of the Living God.

PSYCHOLOGY OF ART.—One of the chief obstacles to a philosophy of art has been the lack of a comprehensive science of mind which shall provide for and explain the different historic and persisting types of consciousness, thought, and art-ideals. An ade-

quate psychology, or science of mind, is indispensable to the study of art and the intelligent analysis of its works. Æsthetic science must be conceived in harmony with psychologic science (which is its subjective basis), and be carried along on parallel lines with this science, and even as a part of it, in order to present the subjective side of art, and to establish the relative value of the different departments of artistic experience. Without this scientific knowledge of the human mind, there cannot be a true philosophic judgment of works of art; for this psychologic knowledge is the first condition of this judgment in its determination of the comparative value, dignity, and rank of the work, by establishing the place, in the mental order, of the faculty to which belong the ideal content and the construction and appreciation of the work of art. The species of artistic beauty or deformity to which any work of art belongs must be related to that psychologic species of beauty or deformity in the various departments of the mind which is the psychologic cause in its production, and the faculty by which others than the artist observe, recognize, and appreciate its artistic quality and ideality.

According to our psychologic system, the general divisions of the Mind are (1) the Reason, which sees the universal ideas of Being, Nonbeing, and Becoming; (2) the Sentiment, which is intuitive and conceptive of the supernatural relationships of man; (3) the Intellect and Affection, which constitute the sphere of Thought and Feeling: and these three regions personify the mind, or constitute its spirit, soul, and body, in the normal condition of which the body is subject to and productive from the soul, and the soul to and from the spirit; while each of these regions is dualistic in its constitution, i. e., is intuitive and conceptive of both truth-good-beauty, and falsehood-evil-deformity, is both constructive and destructive. We find, in the Reason at the summit of the mind, opposite generic principles; on the one side, Truth-Good-Beauty; on the other, Falsehood-Evil-Deformity; and these stand for opposite universal ideals or genera of vision, each of which becomes distinguished into many species as it becomes ensouled by the Sentiment, and incorporated by the Intellect in Thought. Thus, we find the Universal Beauty and Deformity of the Reason; the Philosophic and Ontologic

Beauty and Deformity of the Philosophic Sentiments; the Religious and Theologic Beauty and Deformity of the Religious Sentiments; the Moral and Political Beauty and Deformity of the Moral Sentiments; and many species of Psychologic Beauty and Deformity in the Intellect and Affection; and it is only by recognizing these divisions of the Mind, each with its distinct order of intelligence, and these opposite ideal principles as typical psychologic causes, that we can explain the phenomena of Philosophy, Religion, and Politics; of art, consciousness, and life.

Art is a universal intellectual form or organon conceived and constructed by the understanding, which we conceive to be constituted an intellectual totality through and in which Truth-Good-Beauty, on the one hand, and Falsehood-Evil-Deformity, on the other, become incarnated in Thought. The intellect is the great laboratory of thought, an incorporating sphere in which all ideals. laws, and phenomena realized by the Reason and by the Sentiment (which constitute the spirit and soul of the mental organization) are incarnated in sensible images and forms of thought founded in intellectual experience—an experience of which sensation is the external and material element, intuition the internal and individual element, inspiration and reflection the universal and creative elements. It is necessary that this incarnation and definition in thought should be realized before the rational and sentimental ideals, laws, and phenomena (which constitute the highest sphere of human intelligence and knowledge) can be intellectually comprehended or understood even by the creative mind itself or be communicated from one mind to another, and by other minds be either apprehended through external representation or be understood through reproductive reflection. We conceive that this intellectual totality is constituted in the triindividual form of spirit, soul, and body, corresponding with the form of the entire human mind and with the entire personality of man; and that these three spheres of intellectual realization are personified by three great intellectual incarnating powers, Imagination and Fancy and Technics, which are the constructors of the spirit and the soul and the body of Thought, of its universal and its individual and its material elements and departments.

It has been very common among writers on art to separate certain forms of art from intellectual consciousness, but this error arises in false views of the nature of thought (that is, of intellectual consciousness), by which it is confined to the logical form of thought, and the laws of logic are identified with the laws of thought: thus excluding the Imagination, with its analogies, from the intellectual nature, of which it is the highest and most important factor; as well as excluding the Fancy (with its external and unreal similitudes and resemblances), which is, of all intellectual faculties, the most prolific in thought. Some have gone so far as to identify thought and language, thus excluding from the Intellect all except linguistic forms of thought. But it must be borne in mind that language, though an important instrument in the expression and definition of thought, is only one form of thought, and that there are many forms of thought in Art and Science and Industry that are not and cannot be expressed in All works of formative art (architecture, sculpture, painting) may be most definite forms of thought, as complete as are the literary arts of expression (language, poetry, music). Under this identification of thought and language, much of the arts of religion and government would be erroneously excluded from thought.

Some writers would confine the experience of art to the emotions and feelings, excluding thought. But the highest artistic experience cannot be realized without artistic thought as well as artistic feeling. Neither the artist who creates nor the observer who may merely perceive can realize even artistic emotion without intellectual presentation; for it is the intellectual realization of the ideal content in a work of art (either apprehended or comprehended) that constitutes the real perception of it by the mind, and makes possible a true responsive emotion of the individual consciousness on the presentation to it of this mental perception. These writers may be misled through not recognizing the spontaneity of some forms of artistic thought, which are so contrary to logical thought as to give them the appearance of emotion-but emotion is an activity of the soul (not of the mind), is an act of individual consciousness cooperating with the artistic Sentiment and Intellect.

ART IDEALS AND STANDPOINTS OF THOUGHT. — An important requisite for the interpretation of human thought, including art, is a true theory of human intelligence and knowledge which shall provide for the recognition of the different types of consciousness and intellectual standpoint from which primordial being and the objective world are viewed, because ontology or the science of being must always furnish the basis of thought.

If we study the natural history of thought as we would study anything in Nature, with the idea of classifying its phenomena, we shall find that we can ordinate these phenomena under four ever-recurring types, resulting from distinct universal ideals and intellectual standpoints, which are founded upon different conceptions of primordial being, of the origin of the world, and of the relation of the world to primordial being: these are the theistic-supernatural, the natural, the material, and the nihilistic-supernatural ideals; and we have so named these ideals, because they respectively posit, as primordial being, the Personal God, Nature, Matter, and the Impersonal Nothing. These ideals must always persist in human thought, and always conflict: they are the great psychologic personages who construct and destroy civilization.

The two great realms of consciousness are the theistic-supernatural, which is the Extreme Right, and the nihilistic-supernatural, which is the Extreme Left: these are founded on constructive and destructive root-principles which constitute the opposite poles of this universe of intelligence and of thought. The positions midway between these opposites are the natural standpoint, which is the Right Centre of consciousness, and the material standpoint, which is the Left Centre; and these midway positions are merely half-way houses on the way from dormant or diseased constructive-supernatural root-principles to those which are radically and offensively destructive. We have so often seen the road travelled, in all times and in all countries, but especially in our century, that we cannot be in doubt (if we at all regard the teaching of history) that, after leaving the camp of the extreme right, the theistic-supernatural realm of consciousness, there is but one road, that which leads to the nihilistic-supernatural, or the ex-This is clearly evident to all, in political life, as organized in the popular assembly of every nation; for they all

are alike in including parties representative of these types of political thought, which are only special forms of the universal points of view here presented. We may see these same types, related in the same order of mental progress, in philosophy and religion, in the literary arts, and in the formative arts, based on these separate ideals and standpoints.

These persisting types of knowledge and points of view are exclusive of each other, are found always in conflict, and always reproduce after their kinds in distinct lines of historic development, each with its limitations and well-defined principles. These types or standpoints of intelligence are psychologic norms which form different genera and species of knowledge, each of which claims dominion in the universe of thought, and all of which are needed to cover the diversity of human experience, and have shown their psychologic right to exist by their persistence in human history. The first requisite for understanding the significance of any phenomenon is to classify it under its generic and specific norm of ideality and thought, and thus know the principle which has caused it.

All attempts to interpret the phenomena of human thought and experience as the historic manifestation of one principle and one system of ideas—or as the failures and the more or less successful attempts to actualize any one general principle and system of ideas—are utterly groundless and lead to confusion of thought, because these phenomena are produced by the causative operation of these several classes of ideality, which are fundamental norms of human nature, standpoints of consciousness, and psychologic causes that are antagonistic and exclusive of each other, and each of which attains its own significant manifestation. The true method of interpretation of the history of human experience is to conceive these ideals and connect them with their manifestation in generic and specific types of thought. It is by this means alone that relative order can be produced in the chaos and conflict of natural manifestation; while the result of applying to this chaos the law of monism is to destroy the significance of words and ideas and to confound language.

Dualism and discretion are laws of the natural world; and the history of thought can be explained only by recognizing these op-

posite genera and several species, each of which has distinct and different ideals of consciousness, species of knowledge, and laws of certitude, and includes a conscious aim to actualize its own ideal, as distinct from every other, in its corresponding type of These ideals possess appropriate characteristics, limitations, and boundaries; and they are called points of view or standpoints in the consciousness because they are distinct kinds of mental eyes through which, or according to the perceptive laws and power of which, all things are contemplated. Some one of these classes of consciousness dominates every historic epoch and each individual, marks and names the total condition—the kind of development and perceptive power of all the mental faculties-and predetermines the knowledge and opinions of this epoch and this individual in all spheres of thought. This is so true that, given the mental standpoint and consistency of thought, one may predict the intellectual conclusion or judgment on any subject; in fact, the conclusion is necessitated to follow from the point of view of the ideal of causality, conception of reality, and theory of knowledge which constitute this standpoint.

We find both subjective and historic evidence of the existence of these psychologic types, because these separate orders of human consciousness spread throughout the mental organization, and constitute a four-fold possibility or potentiality in each department of the mind. These kinds of perception and judgment are distinct, do not merge into but conflict with each other. If I interrogate my own consciousness, I find them all there; and I find that the chief disturbances of my peace of mind arise from the conflict carried on between these types of intelligence in my own mind; and that, when my supernatural intelligence operates, my experience is of an order entirely different from that of my natural intelligence, over which it is continually called to maintain its supremacy—different in its objects and in its laws and in its kind of knowledge, different in its point of view and in its method At times, my natural as well as my material conof thought. sciousness asserts itself in opposition to my supernatural consciousness and belief, which at this time may be weak or in abeyance; and I clearly recognize this state of weakness and scepticism, and

the complete analogy of this temporary and partial condition of my own consciousness with the permanent and controlling presence of these natural and material types of consciousness in other persons, where one of these types has a supreme and even unimpeded operation (as in the natural man and the material man), bounding the mental horizon of these persons with an exclusiveness of other standpoints which convinces them that these other points of vision have no reality and therefore do not exist.

If we investigate the history of thought, we find that these standpoints are the psychologic personages who rule the affairs of men; and that the reality of interpretation of any period depends on the true conception of the point of view from which its characteristic experiences are realized, and in the light of which it interprets the world of thought and experience, both past and present. One of these standpoints so predominantly characterizes every period of the history of a people as to constitute a distinct type of civilization. In estimating any work of art, we should get at the universal ideal and intellectual standpoint from which the work is constructed; for this will enable us to rank it, will give unity to our interpretation of it, enable us to explain it by itself and to detect its inconsistencies. It is the same, whatever be the subject under consideration; whether it be philosophy, religion, politics, or any of the kinds of literary or of formative art. By this classification we may give reality (though relative) and place to every species of experience that has been established in the historic order of civilization; we may conceive the ideal meaning and artistic type of each species, characterize it, and recognize its factorship in the successive development of the human consciousness.

The philosopher truly says: "A work of art is made what it is by its ideal content." Now, what does this mean? It means that the ideal which the artist had in mind (and which he incorporates in thought in order to define it to himself and to present it to other minds) constitutes the causative principle of this work of art; and that the artistic form with which he clothes this ideal is the external means by which the ideal is expressed in actuality—is defined in thought to his own intelligence, is com-

municated to the minds of other men, and comes into the consciousness of all capable of perceiving it.

This ideal content may be of different orders of thought. I. The artist may have in mind only material motives and ideas to express, and either to imitate the external appearance of things or to conceive the material ideal of the species, and the unactualized possibilities of material natures—to consider merely the material structure, qualities, and functions of things. The artist thus produces a form of material art (whether ideal or imitative and realistic) which treats his subject (even the human subject) as merely a body, as to its very entity—whether he present the actual appearance of things or the material ideal and possibilities of the species—in conformity with the axiom of the materialist: Everything that appears to the senses and the material consciousness is real; and everything that really is so appears.

II. The artist may have in mind a naturalistic motive or idea to express, and to represent either the apparent nature of objects (some actual natural experience or observation of mind) or some unactualized form of natural consciousness, in a corresponding artistically expressive physical form; that is, either to express the internal and psychologic appearance of things or to conceive the natural ideal of the species, their individual and characteristic structure, qualities, and functions; and thus to produce a form of individual, naturalistic, psychic art, which treats his subject as a natural soul, possessing only a natural constitution and consciousness, the appearances of which are conceived to be identical with its reality — thus conforming to the axiom of the naturalistic standpoint: Everything that appears to the natural consciousness is real; and everything that really is appears to the natural consciousness. This is the pseudo-rationalistic standpoint.

III. The artist may have in mind ideas of universal or of supernatural significance, ideas of ontology and theology, of absolute being and the spiritual relations of man; or he may represent the supernatural side of human nature, either its actualities or the possibilities involved in it, conceiving some unactualized supernatural capacity of man; that is, he may express the philosophic reality of things, their ideal structure, qualities, and functions, and thus produce a form of universal art which treats

his subject primarily as a supernatural or representative-spiritual being, possessing a supernatural nature and consciousness, the reality of which consists in its relation with and consciousness of supernatural and spiritual existence—in conformity with the axiom of the supernaturalist: All reality and truth are in supernatural and spiritual existence, and in either the supernatural or the spiritual consciousness, which are foolishness to the natural and material mind. As the supernatural appears in opposite generic ideals (the theistic and the nihilistic), we find four species or kinds of art, produced from distinct ideals and standpoints, which must always persist in human history; and we may classify all works of art under these four heads, as characterized by one or other of these ideals.

These four standpoints of human consciousness appear in the history of thought, sometimes alone, sometimes side by side, sometimes in successive manifestation. In successive supremacy, they appear in each cycle of development in the order of enumeration, beginning with the theistic-supernatural ideal on a plane of consciousness higher than it reached in the preceding period, thereby realizing that general progress which is necessary to a state of Thus—though the law of development in this cycle is that of degeneration from the theistic-supernatural (1) to the natural, (2) to the material, and (3) to the nihilistic-supernatural ideal, while in each of these periods there is a special degeneration in the development of each type—in the general cycle the law of birth and of revelation produces the regeneration and elevation of the consciousness and life on a higher plane of experi-We find, then, in the history of every one of the products of human intelligence-in Art (from philosophy to painting), in Science, and in Industry—these four general ideals, for we find in man himself these theistic-supernatural, natural, material, and nihilistic-supernatural types of consciousness; and each individual is characterized by the supremacy of some one of them, which thus constitutes the general standpoint from which he contemplates all things. The most intelligent and clear-headed men are those in whom one of these types pervades and characterizes his entire mental constitution, giving him an innate unity of vision and consistency of thought. Furthermore, we must expect that

these distinct types of consciousness will persist so long as humanity exists: they will always conflict, and the most so when in their normal and healthiest condition. If any one of them appears to come to an end, it is only dormant for a season and will return to activity and reproduction at its appointed time. All attempts at fusion by demolishing these landmarks of thought mark the temptation of Naturalism and Materialism and Nihilism addressed to a weakened and demoralized theistic-supernatural insight.

The principal cause of conflict and confusion in thought is the failure to recognize and distinctly conceive the theistic-supernatural and the nihilistic-supernatural as opposite generic standpoints and psychologic causes, and to recognize their self-consistency and their necessary persistence in thought, and therefore their right to exist in this natural world of opposites. This endless conflict is increased by the failure to recognize the supernatural, natural, and material ideals as separate and specific standpoints and normal types of thought; by the failure to see the partial character of actual experience; and by the claim that each standpoint makes-that its own ideal is generic and universal and covers the entire ground of reality. This self-assertion of one or of another partial ideal claiming to cover the whole ground of reality in thought carries with it the denial of all reality to other species of consciousness. Relative peace in the intellectual arena can be made only by recognizing distinct genera and species in the kingdom of consciousness and of thought; genera and species which are quite as distinct as are those in the human, animal, vegetable, and mineral kingdoms; and which as distinctly propagate under laws of generic and specific continuity, increase and multiplication, each producing its like in the world of ideas; each having a definitely limited field, denying the reality of its neighboring genus and species, and making continual effort to destroy Conflict, war, extermination is the law of life to these ideals and standpoints of thought; yet they all must continue to exist in order to furnish an environment, a spirit, and a specific form for the inevitable and continuous reproduction of these types of human consciousness in this world of partial experience, of unreal life, of discordant thought: i. e., it is a natural world in which we exist. The maintenance of the conflict is a sign of generic and specific vitality in each; and the drawing together of differing opinions now to be observed is a sign of indifference or of blindness, not of real union; because, in reality, these points of view are mutually exclusive, and this drawing together is the result of loss of separative insight and of reality in thought. The contest between Theism and Nihilism is radical to life, and their pseudo-union in Liberalism is a sign either of torpidity, or of death to a Theism already devitalized by a pervading Pantheism.

We find all these four points of view in disorderly manifestation during certain transitional epochs preceding new psychic births, such as those of the Christian era, of the Protestant period, and of the present century, when the new type of civilization has not yet been constructed, while the old types are losing their hold upon the people through loss of vitality in institutions and loss of insight by the people. This complex and disorderly manifestation must continue until the new constructive ideal has reconstituted social institutions, and comparative order has become established in the universe of thought. These periods of transition can be interpreted only by recognizing the presence of different and conflicting types of thought, which persist historically in continuous intellectual species, but which at such periods come into the consciousness with renewed perception and activity, greater intensity and insistence, and more expanded development. though these four ideals are mutually exclusive and never unite in a single act of real consciousness, and though the theisticsupernatural is in conflict with the three other ideals, yet, in these transitional epochs, the nihilistic-supernatural ideal forms a coalition with the natural and material ideals, because it is (unconsciously to them) the causative principle of their common opposition to Theism. The nihilistic-supernatural ideal thus uses the natural and material ideals and types of civilization with their gradually disintegrating forms of intellectualism (rationalism, doubt, criticism, and skepticism), in its destructive work and in its efforts to establish a pessimistic humanity on the ruins of theistic civilization, whether this humanity take the form of the bête humaine of the material ideal or of the diable humain of the destructive-supernatural ideal. It is only by a new birth of the theistic-supernatural ideal and the reconstruction of Christian

civilization, as the City of God, that any real opposition can be made against this material Babel, or City of Satan.

As we find in the dominant philosophy of our time either a realistic materialism or a transcendental pessimism—so, in literary and formative art (especially in poetry and fiction and painting), we find a preternatural realism of the ignoble and the horrible side of human nature, which educates and develops the Satanic image in man. Hitherto the mission of the art of our century, from Philosophy to Painting, has been to educate and develop this destructive side of the human constitution as well as the lower phases of its possible experience; and the only way that art can be reborn onto a higher plane and again become the handmaid of the Christian religion, is that Christianity itself should be born from on high and again enlighten the world of humanity with the reflected light of God-then shall Truth-Good-Beauty, the image of the Divine Logos, again become the ideal in art from Philosophy to Painting, and the representative Kingdom of God be again established on the earth.

DEFINITION OF ART.—Before attempting a positive definition of Art, we will refer to some of the imperfect definitions still accepted in æsthetic circles. 1. The definition (held by so many), that art is a representation, in sensible forms, of ideas of sublimity and beauty and the picturesque, is not adequate, because the larger half of art is an embodiment of the principles of the horrible, of deformity, of the grotesque, and with greater artistic and subjective reality. 2. It is not specific to art, to say (with Hegel) that it is "the union of the objective and subjective in the human spirit . . something inward, a content, and something outer which has that content as its significance." This definition is too broad, for it does not distinguish art from every fact of existence: every actuality of life has an internal and an external, a subjective and objective element. 3. It is not the object of all art to give pleasure (as some tell us), for the aim of a great body of works of art is to cause pain—such as terror of destructive force, and the pain excited by the representation of death and misfortune in tragedy; while some (like the social arts and many of the higher forms of art) give satisfaction or pleasure to some and pain to others. 4. The school which makes art to be only subjective, and denies

its objective reality, removes its civilizing function and misrepresents its very nature, for art is the embodiment by the human mind of the objective reality of things both above and below itself, by means of its own subjective reality, symbolizing absolute and dissolutive reality, and realizing opposite relative reality, both actual and possible. 5. It is not a definition of art to say that it is idealism and symbolism (vs. naturalism), because, beside the art of symbolism, there is an art which is founded on naturalism and on romanticism; also an art that is founded on imitation and material realism. It is not defining art to identify it with imitation, for imitation is but the lowest function of the deprayed type of art. 6. It is most untrue to say (with Edmund Burke): No work of art can be great but as it deceives, for this is the most superficial form even of realism. 7. It is not a true definition to make art consist in technic form, abolishing subject and ideal content (Schiller), for the ideal content is what makes it art, and gives it reality and universal significance. The definitions that art is the significant, the characteristic, the expressive, which are favorite definitions of modern writers, are both vague and insufficient, for two reasons: (1) because these terms are most suited to and are oftenest used to express only the individual element in art; (2) because no distinct art-principles are presented as the ground of reality (whether objective or subjective), and this presentation is necessary to a definition. Still, though vague and insufficient, the combined definition, that art is the significant, the characteristic, the expressive, would be nearer the truth than that which would make art and beauty to be equivalent terms, because the above terms apply to the art of the horrible, deformity, and the grotesque, as well as to the art of sublimity, beauty, and the picturesque. But it would be far from a true definition to identify the characteristic, the significant, the expressive with beauty, for the art of deformity includes these attributes as well, and much more so, as being nearer to the internal nature of man. Expression, characterization, ideal significance, all must be recognized in art; but, even then, we are far from a definition of art, for the reason that there are opposite art-principles, and that such terms as would truly apply to both of these opposites are necessarily few and vague. The definition of art must include

the presentation of these opposite principles in distinctly separate ideals: first, of the ontologic principles which constitute the objective reality of art; second, of the psychic principles which constitute its subjective reality in the human mind.

Art is the universal organon for the representation (in intellectual form, or in thought) of the total ideality of existence, both actual and potential. This total ideality of existence includes that network of principles of the unseen universe which constitutes its complex system of causality; those principles of many different orders which are the secondary causative agents in the world's productive and destructive operations; and it is the mission of art to incorporate these principles, apart from their complexity, conflicts, and confused manifestations in the natural world, so as to exhibit them in ideal and sensible form according to their single operation and normal relations. Art thus presents the total ideal capacity of the race in the various spheres of its activity: it is the supreme mode of bringing into definite and effective consciousness the highest as well as the lowest ideal capacities of the human mind: the capacity for the supernatural (or for the things above it in the scale of existence), for the natural (or for the things of its own nature), and for the material (or for the things below it): the capacity for the highest and the lowest truth-good-beauty, and for the highest and the lowest falsehood-evil-deformity—those great psychologic opposites which contest the possession of the soul and produce its regeneration or degeneration on all planes of its experience. Art is thus an objective ideal world in communion with the subjective ideal world in the mind of man: it has reality both outside the mind, as object, and within the mind, as subjective experience. As object, it is realized under its own general laws as the highest individuality in civilization, which operates upon the human race in its historic development, in its regeneration and in its degen-The subjective ground of art is in the dual roots of the mental organization, which are found primarily and in their most concentrated form in the opposite principles of the Reason, which is the spirit of the mind. These opposite principles are truthgood-beauty and falsehood-evil-deformity; and their ideals become ensouled and incorporated in the lower departments of the mind

-in the Philosophic, Religious, and Moral Sentiments, in the Thought of the Intellect, and in the Feeling of the Affection. This subjective ideality in the mind is the basis of the creative power of the artist, the basis of taste and of judgment, and of the ability to see in works of real art (from philosophy to painting) their ideal nature and significance, as distinguished from their merely natural and sensual appearance. This mental susceptibility to the ideality of the objective world and of absolute causes, and this artistic creative power, constitute an innate ideal capacity in the mind which arises in the microcosmic character of man's The same realities which are imaged or symbolized in the great created cosmos, the macrocosmos (these realities being the absolute cosmos, God, and the dissolutive chaos or acosmos, the Nothing), are imaged or symbolized in the mental organization and consciousness of man, who is the small created cosmos, the microcosmos. These primary images and the analogic relations between God (the creative cosmos), the Nothing (the decreative chaos), the Universe (the created macrocosm), and man (the created microcosm) constitute the ideal basis of art, both objective and subjective; and to perceive and incorporate in thought these integral images and relations is the highest mission of art.

MISSIONS OF ART.—Art has three missions: it is historic, interpretive, creative. I. The first mission of art is historic-it is to perpetuate or place in permanent form and preserve for the instruction of the present and of future generations the essential manifestations of man's individual and collective ideal experience. to operate not only as records, but also as suggestive material in the ideal conception of human nature and of its unrealized possibilities. Art, in its historic mission, thus incarnates in sensible form the changes of actual life, the temporary and passing conditions, ideas, and essential manifestations of humanity in all spheres of experience—whether universal and supernatural, or individual and natural, or material and sensual; so that future humanity may not be confined, for the sources of its knowledge, to present experience (which constitutes but a small section of the circle of human life); but that humanity may work from the basis of civilization and of the world's history, being able to realize the actuality of the past as an ideal conception of the artistic faculty, even

when the individual would not be able to realize this actuality as a personal experience—for his artistic faculty enables him to see it from an impersonal point of view.

Art thus preserves the types of such high orders of human experience as human genius is incapable of realizing in periods of degradation, when Materialism and Atheism flood the human mind, and Realism governs its artistic products. In these periods, art is the ark in which are preserved the sacred ideal types, that they may again serve as suggestion and stimulus to human thought, when the flood shall have subsided and the fields of human nature shall again bring forth by a new creation from on high—when the dormant seeds of the higher fruits of human intelligence shall again germinate and bring forth fruit, and reproduce, each after its kind, in the reconstruction of Christian civilization on a higher plane of experience.

II. The second mission of art is interpretive—it is to make clear to thought the ideal significance of human realization, of the actualities or realized possibilities of human nature: to bring to light and emphasis the ideal principle and cause involved or centred in concrete manifestation; to present the reality of things which is behind their appearance—the hidden meaning which is concealed from the eyes of common sense; and to separate the opposite ideals which are found mixed in concrete nature, and present them as distinct intellectual individualities, with their corresponding laws and phenomena. This function of art applies to both past and present realization. It is most important in its interpretation of the universal ideals of the past and of the corresponding special types of thought; intellectual types which the present consciousness may be incapable of realizing as a personal experience, but which may be ideally reconceived by the artistic mind, and which are useful for suggestion and stimulus at those periods of new birth in the human consciousness when, in the revolution of the universe of thought, these ideals of the past again return into the consciousness to be incorporated in intellectual forms which shall correspond, as to progress, with the new birth of the mind and soul. This renewed perception of old ideals is accompanied by the creation of new types of thought and by new forms of individual experience; and these constitute a starting-point in the new circle of revolution, as humanity (under

the law of circularity) again passes over the same ideal longitude on a higher plane of consciousness-activity-life.*

III. The third and highest mission of art is creative—it is to conceive and to incorporate in adequate sensible form the unactualized possibilities of human nature. These are of three kinds of ideality, and require three different kinds of artistic mental power, which are represented by the man of Talent, the man of Genius, the man of Inspiration. 1. The man of Talent and of Fancy, through a fictitious ideality, creates those fanciful and ephemeral forms of art which attribute to things fictitious qualities, and institute fantastic relations, founded on superficial and apparent resemblances - comparing things that internally are either in discord or are without any real relationship. 2. The man of Genius and of Imagination, with intuitive insight into generic and specific law and relation, creates those natural and material ideals and their corresponding forms of art which present the ideal of the species—the natural types of things that the original genius has seen lying dormant in the natural man and in Nature. 3. The Inspired Artist and man of Reason, with prophetic vision of eternal truths, sees the universal principles of Being, Non-being, and Becoming; sees in Becoming Existence the analogies with Being and Non-being, and creates those universal institutions which represent these truths and preside over the development of man; he creates those works of art which represent superhuman causes and the relations of man to these causes, incorporating in the intellectual symbolism of the Imagination the supernatural intuitions and conceptions of the Reason and the Sentiment. The inspired creative artist is a seer, and the pioneer in the supernatural history of man: he sees the possibilities of humanity and awakens in man his dormant perception and faculty. In all constructive periods of civilization the inspired creative artistwhether he be philosopher, priest, or governor; philologist, poet, or musician; architect, sculptor, or painter-conceives and presents the norm of possible experience, and the apprehensive mass

^{*}Such a new birth was realized at the Christian era, and again at the Protestant era; and another is to be expected in our time, as Protestant civilization appears to have run its course in the most advanced portion of civilized peoples. The historic churches of Saints Peter and Paul (Catholic and Protestant) having fulfilled their historic mission, we may now look for a new civilization which shall follow the gospel of St. John, and complete our cycle of historic Christianity on this earth.

of the people respond to this presentation and teaching by incorporating it in actual life. Thus, the highest category in the creative mission of art is to symbolize, in the natural world (with an ever-increasing distinctness and elevation as the circle of human experience revolves), that spiritual existence and those spiritual laws and ideas which cannot here be realized, but the representation of which is the vital element in the natural world and the medium of analogic relation with the spiritual. This sphere of representative-spiritual life we call supernatural, though it is necessarily an integral part of the natural constitution of created things: that which connects this constitution with its creator and with spheres of existence above itself.

With regard to the highest subjects of thought, we cannot, in the natural world, establish the simple and inflexible relations and the clear vision of spiritual science: symbolic thought, in its representation of spiritual truth-good-beauty is our nearest approach to it. It is analogic and idealistic thought that expresses this veiled vision of the Divine Logos, of which the True Reason of man is an image—the logical and realistic intellect of pseudorationalism is blind to this symbolism, which appeals to the imaginative intellect that created it. The logical intellect bruises its beauty with critical energy, pulls it to pieces to find out its mechanism, and contemplates the débris of its lifeless members with contempt, blind to the light and beauty which it has destroyed. But this is historic necessity—for, as change and particular degeneration are the invariable laws of the natural world, the inevitable result of historic succession (at the end of each great period) is to enthrone the logical and fantastic intellect, with its blind realism and its licentious fancy, in the holy places of the truth-goodbeauty of the Reason and Sentiment and Imagination, which it occupies jointly with its master and ally and cooperator the nihilistic-supernatural, which is the self-conscious exponent of Falsehood-Evil-Deformity. Thank God, the natural law of universal progress is equally invariable, and we may faithfully trust that humanity will be born again from on high, and the supernatural eyes of man be again opened to the Truth-Good-Beauty of the Kingdom of God.

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A BASRELIEF FROM PHALERON.

[PLATE XII.]

A most interesting and beautiful votive-relief, sculptured on both sides, was discovered in 1893, not far from Phaleron, and was briefly described by Mr. Dragatzes in the Hestia of June 27th, 1893. It also forms the subject of a paper by Mr. Kavvadias in a late number of the Ephemeris.1 The relief is of such artistic merit and mythological interest that I venture to add a few remarks to the excellent ones already made by the Athenian archæologists. The marble bears on both faces a sculptured relief, and above each, under the crowning pediment, some descriptive inscriptions happily remain. Thus, we are informed that the youth in front of the chariot is Hermes, while the occupants of the chariot itself are Echelos and Basilê, though the present condition of the letters points to Iasilê. On the other side we find the dedication: EPMHI KAI NYM Φ AI Σ IN. letters follow, but with the exception of the first five (which I read AAEEO), they are beyond recognition. Perhaps it was the hexameter: Έρμη καὶ Νύμφαισιν 'Αλεξώ ταῦτ' ἀνέθηκεν. The A of ἀνέθηκεν may indeed be distinguished.

As Mr. Kavvadias tells us, we know from the Etym. Mag. and from Steph. Byz. that Echelos was hero-eponymous of the Attic deme Echelaidai, and that his name was derived from the marsh (£\(\delta\cop\)) in that deme, between the Peiraieus and the Herakleion, in which latter place the gymnastic games were held during the Panathenaic festival, undoubtedly the ancient hippodrome identified by Curtius, and close to the spot where the monument was found. As to Basilê, we know of her sanctuary between the Athenian theatre and the Ilissos (CIA, IV, 53°; cf. Plat. Charm. 153). But, as Kavvadias remarks, we learn most about her from

^{1 &#}x27;Εφημερίτ 'Αρχαιολογική, 1893, pls. 9, 10; pp. 109–112. 202

Diodoros (3.57). Basileia and Rhea were the two eldest daughters of Ouranos and Titaia (or Ge as she was called after death). Basileia excelled all her seventeen brothers and sisters in wisdom and brought them up like a mother, so gaining the name of the Great Mother. After her father's death she received the kingdom by the consent of all, though still a maiden and not wishing to marry. Desirous of leaving a successor, however, she at last married the brother who was dearest to her, Hyperion, by whom she became mother to Helios and Selene. Her brothers thereupon, through jealousy, slew Hyperion and drowned Helios. Selene, in her grief, threw herself from the roof, and Basileia, the mother, in her search for the body along the river, went wild. Helios, however, appeared to her in a vision and bade her cease lamenting, as he and his sister had become immortal and their names had been given by mankind to the sun and moon. His brothers would meet with proper punishment in time. After this dream, Basileia directs all to pay divine honors to her dead children, and forbids any one to touch her body. She then wanders about the world in her madness, playing with the noisy toys of her daughter, frightening everybody with her tympana and All take pity on her condition, but on one occasion when some one attempted to touch her, she suddenly disappeared from view in a shower of rain and thunder, and forever after received divine honors, together with her two children. Altars were built to her, and tympana and cymbals were employed in her service.

As Kavvadias remarks, the passage summarized above seems to throw some light on our relief. The fact that Basileia allowed no one to touch her, and that when touched she vanished midst rain and thunder, strikingly reminds us of the rape of Persephone, both myths evidently referring to the disappearance of the summer verdure and the approach of stormy winter. The greatest importance attaches to the version as given by Diodoros, as it certainly seems the prototype of the Eleusinian and Sicilian myths of Korê. Demeter herself (Mother Earth, i. e., $\Gamma \hat{\eta}$ -Yeéa-Kubéh η -Ba $\sigma(\lambda \eta)$, according to this older story, is the victim of violence. In the later myth her daughter is substituted in her place, and the mere touch developes into a rape. The scene on the

relief represents an intermediate stage of the myth. Basilê is there being carried off, but her abductor is not Hades. He is the youthful Echelos. Who, then, may this Echelos be? If we turn to the Eleusinian legend, we find that Eubouleus, originally an epithet of Hades, afterwards became the name of a youthful swineherd said to have been present at the rape of Persephone. Echelos also, I take it, was originally applied to the infernal deity as the "marsh-dweller." he whose home is below the soft marshes in which men sink to rise no more. The entrance to the lower regions would as naturally be located in the marshes as in the caverns of the earth. Instead, then, of the vouthful Korê and the elderly Hades, as in the Eleusinian myth, we have the matronly Basilê carried off by the youthful Hades or Echelos. On the other hand, instead of the mere touching of Basilê and her sudden disappearance from view as in the legend of Diodoros, we have Hades introduced as the ardent and violent abductor, a subject more suitable for the sculptor and artist than the older story. Indeed, it may be that to the sculptor and vase-painter are due the rise and subsequent acceptance of the later myth in preference to the former. But this is mere hypothesis.

Again, before leaving Echelos, I may venture a further suggestion, that this Hades-Echelos may be identical with the Echetlos of Pausanias, who alone mentions him as the divine hero, who appeared on the field of Marathon during the great battle and assisted the Greeks (Paus. I. 15–3; I. 32–4). It may be that Pausanias made a slight mistake in the name, or it may be an error of the MSS. From the well-known marshes of Marathon, Echelos or Hades, the marsh-occupier, might well have ascended to aid his worshippers and fill his realms with Persian dead. A rumor to that effect once started by the demesmen of Echelaidai would easily find credence at such a time amongst the assembled Athenians.

As for Hermes, to whom, along with the nymphs, the votive offering is dedicated, he is most appropriately portrayed in the act of conducting Basilê to the underworld. So also he figures in the Eleusinian form of the myth as conductor of Korê back to earth.

Turning to the other relief, there is little doubt in my own mind that Hermes is here likewise represented in the left-hand

figure. I fail to be convinced by Mr. Kavvadias, in his attempt to identify that figure with Artemis, nor do I recognize a rivergod in the bearded personage in front of him, since he has no horns like his companions behind. Mr. Kavvadias sees in the relief a representation of two distinct groups: (1) The Ilissos river and Artemis (Agrotera or Munychia), and (2) the Kephisos with three nymphs. The scene, to him, allegorically represents the meeting of two cults located respectively on the Kephisos and Ilissos, the site where the marble was found being near the spot where these streams unite their waters. The position of the figures is against such a theory, to say nothing of the want of all connection in idea with the scene on the other side of the votiveslab. To my mind the explanation is rather this: The nymphs, attended by Kephisos, the river-god of Athens (or, it may be, Achelôus, who was worshiped at Athens along with the nymphs) and by Demos himself, the personification of Athens, are coming to Hermes who stands listening to Demos, the spokesman of the five. They are naturally enquiring after their abducted Basilê, and supplicating for her return. Hermes conducted her away and Hermes can give her back. The Athenian fields and brooks long for the coming of spring, in other words. In the Eleusinian myth Korê had been carried off by Hades while she was plucking flowers with her nymph-companions. Here it is the Great Mother Basilê whose return is longed for, but Mr. Kavvadias shows us that the Great Mother herself, no less than Korê, is frequently associated with the nymphs even in later mythology.

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A TERRACOTTA SKETCH BY LORENZO GHIBERTI.

[PLATE XIII.]

In the autumn of 1892, I purchased of the Fratelli Bassetti in Siena a terracotta sketch, supposed to be by Ghiberti. It was said to have been long in the possession of a Sienese family. Further than this I know nothing of its provenance. The sketch has every apparent indication of being an old one. Traces of coloring, now largely washed away, still remain. At some period of its history the sketch had fallen from its place and broken in several places, but its original fragments were carefully gathered and mounted on a slate ground which seems to have been cemented on to a wall, so as to prevent further injury. The subject of the composition is a portion of the group to the left in the Moses panel of the second of Ghiberti's bronze gates for the Baptistery of Florence. In his Second Commentary, Ghiberti gives this brief notice of the composition:-"In the seventh panel is (represented) how Moses received the tablets (of the law) on the mountain, and how half-way up the mountain Joshua waits for him, and how the people are astonished at the earthquakes, lightnings and thunder. And how the people stand at the foot of the mountain in amazement."

The incidents pictured in this panel are taken from the book of Exodus, which will furnish us a few additional details for its interpretation. To the extreme left is the Red Sea and the camp which the children of Israel erected before Mount Sinai. The people at the foot of the mountain may be divided into two groups: to the left is a quiet group gathered about an old man, who is addressing them; to the right a group in consternation over the physical disturbances which accompanied the giving of

¹ Carl Frey, Vita di Lorenzo Ghiberti Scultore Fiorentino scritta da Giorgio Vasari. Berlin, 1886, p. 53.

the law. For the sake of definiteness, we may name the old man Jethro, the father-in-law of Moses, who had recently arrived, bringing with him Moses' wife Zipporah and her two sons, Gershom and Eliezer (Ex. 18. 1–6). He is looking toward the Red Sea and seems to be saying, "Blessed be the Lord, who hath delivered you out of the hand of the Egyptians, and out of the hand of Pharaoh, who hath delivered the people from under the hand of the Egyptians" (Ex. 18. 10). Before him is a row of women in light and graceful pose, suggestive of the women who followed Miriam with timbrels and dances. Miriam herself is represented with a timbrel in her hand in a niche of the framework directly alongside of this group. In the foreground of the quiet group is a young warrior, symbolic of the victories already achieved against the Egyptians and against Amalek. Alongside of the warrior is Zipporah, with her two children.

In the excited group to the right is a woman with a frightened child. She is perhaps the Ethiopian woman, whom Moses had made his wife, much to the dissatisfaction of his sister Miriam and his brother Aaron (Numbers, 12. 1). About her are the elders and people, terrified by the "thunders and lightnings," and the "voice of the trumpet exceeding loud" (Ex. 19. 16). Above is figured Jehovah in the midst of angels, handing the two tables of the law to Moses, who receives them on the top of the mount. Below him, prostrate on the ground, is Joshua, who accompanied him (Ex. 24. 13). Aaron is perhaps to be recognized in the centre of the excited group, and is again represented, with the sacrificial flame in his hand, in a niche of the frame to the right of this panel.

In comparing the terracotta with the bronze, I have been led to believe the former to be a preliminary sketch by Ghiberti, for the following reasons:

1. It is not an exact copy of the group in the bronze panel, and its agreements and differences may be best explained on the supposition that it is a preliminary sketch. The principal figures, which we have named Jethro, the warrior, and Zipporah, appear to have been considered by Ghiberti as successful enough to be reproduced with but slight variations in the bronze. These variations, however, are important. The final sketch for the entire

panel, made in wax, contained a more elaborate composition; consequently the three individuals we have named are drawn more closely together and thus separated from the line of women to the left. Jethro, in the bronze, is placed more nearly behind the warrior; the warrior and Zipporah are also drawn closer together. We may observe another important difference, which may be best explained on the same hypothesis. In the final model Ghiberti apparently determined to separate more completely the quiet group on the left from the agitated group on the right. Consequently one of Zipporah's children is removed and finds his place by the side of the figure we have called the Ethiopian woman. As a consequence of this separation, the eye is led through an unobstructed passage between the groups and more readily seizes the principal theme upon the summit of the The artist, however, will not take away from Zipporah her two sons, and so replaces the lost child by another, who serves better the purpose of economy of space.

There are several other figures of which more than a reminiscence is preserved in the bronze. The first figure to the left on the terracotta is reproduced in similar attitude, but with more grace. The old woman next to her is retained also, and is adapted by a change of attitude to the enlarged composition. The man with a turban is not forgotten. There was no room for his face, but his turban remains, and in the same relative position. woman to the right of Zipporah, with hands folded in prayer, is also preserved, but thrown more into the background. There are two other heads, that of a middle-aged man and of a youth, who appear also in the bronze; but in general the artist seems to have developed the idea of presenting a larger mass of people, and this has led him to suppress the representation of several heads and to substitute in their stead an approaching throng, which could be indicated with greater ease and with improved perspective by summarily indicating only the crowns of their heads. In the terracotta sketch, between the warrior and Zipporah is a woman; in the finished bronze a male figure is substituted, which has the advantage of bringing out the figure of Zipporah in stronger contrast.

These considerations seem to show that the variations in composition between the terracotta and the bronze are not such changes as would be likely to occur at the hands of a copyist, but are purposeful modifications by means of which the composition of the terracotta sketch becomes adapted to its new surroundings in the more complex composition of the bronze panel.

If we compare the style of the terracotta relief with that of the bronze, the preliminary character of the former will be still more evident.

The terracotta sketch is composed in a thoroughly plastic manner. The figures in the background were first fashioned and those in the foreground applied later. This is evident from the fact that several of the heads in the background are modelled with great care, as could only have been done when the artist was free to work without the impediment of the figures in the foreground. The face and breast of the warrior show that this figure also was modelled before being put in place. Now this method of plastic composition is not such as is likely to have occurred in the case of a copy from the bronze. Not only would a copyist have been likely to have reproduced Ghiberti's figures more exactly; he also would have copied Ghiberti's perspective and thus saved himself considerable unnecessary labor.

The terracotta group seems to have been modelled with special reference to the characterization of the different figures. There is here a greater variety of individual characters than in the bronze itself. This individualization is purposely sacrificed in the bronze for the sake of the mass, and the entire composition modified by reason of the enlarged perspective.

If we consider the mode of composition employed in the bronze gates, we find as many as thirty-one distinct events portrayed. In only one panel, that which represents the meeting of Solomon and the Queen of Sheba, do we fidd pictured a single event; in the rest there are two, three, four, and in the Jacob and Esau panel, as many as six different actions. The style of composition makes it, therefore, not unlikely that Ghiberti made studies for the minor compositions first, and then combined them in the larger units. This must, at least, be admitted in the case of the Abraham panel, which includes his earlier composi-

tion of the Sacrifice of Isaac; and if in this case, why not in the rest?

3. Having shown the preliminary character of the sketch, it follows almost immediately that it must be by the hand of Ghiberti himself. In the case of the first Baptistery gates, in which the cooperation of other artists was relied upon to a greater extent, the contract specifically demanded that Ghiberti with his own hand should execute the figures, trees, and such details as the hair, the nudes, &c.2 The second gates seem to have been even more exclusively the work of Ghiberti himself.3 He was assisted by his son Vettorio and by Michelozzo; but the mannerism of Vettorio, as seen in the frame-work of Andrea Pisano's gates, and the style of Michelozzo, as seen in his work in association with Donatello, are not to be detected in our terracotta. This is veidently the work of a master hand, as may be judged from the individuality and graceful beauty of the heads and the naturalistic treatment of the drapery. Here and there, I am free to admit, there is a laxity in the pose of certain figures, in the perspective, in the swing of the drapery, that falls short of Ghiberti's best work; but the variation does not seem to be sufficiently strong to compel a different attribution. It is more easily explained by the supposition that the terracotta is a preliminary sketch. Let me call attention to a slight difference between the warrior of the terracotta and the same figure in the bronze. In the terracotta his cloak has a broad fringe and the back of his corselet is differently ornamented. But the variations are strictly within the limits of Ghiberti's own work. The prototype of this figure may be seen on Ghiberti's first gates in the panel of Pilate Washing his Hands. Here and in many other figures on the first gates, and in the panels of the font in the Baptistery at Siena as well, Ghiberti shows a fondness for ornamenting the edges of his draperies. The peculiar type of ornament upon the warrior's back may also be found in the base of Pilate's throne, and again upon the borders of the second gates.

It may be objected that the models for the second gates were in wax, and not in terracotta. A reference to the contract will

³ MUNTZ, Les Archives des Arts, pp. 15, 16.

³ MÜNTZ, Archives des Arts, pp. 19-21.

certainly show that wax models were used for the figures, heads, animals and ornamentation of the borders and cornices; and it may be admitted that the panel reliefs were probably cast in accordance with the same methods. But this in no way prevents our supposing that preliminary sketches may have been made in clay, since Ghiberti himself tells us in his Second Commentary that he made many sketches in this material.⁴ The terracotta sketch is somewhat larger than the original; ⁵ this permitted greater freedom in modelling.

The discovery of this sketch has an important bearing on the estimate to be made of Ghiberti's methods. It would seem to indicate that his preliminary sketches were not made upon paper, but in plastic fashion in clay. In this manner he reached a thoroughly sculptural perspective, to be distinguished from that of the painter, and which should be a perpetual object-lesson to those who would force all relief sculpture into flat planes.

ALLAN MARQUAND.

the bronze it is only four and a half inches.

^{*} CARL FREY, op. cit., Ancora a molti pictori e scultori et statuarii o (ho) fatto grandissimi honori ne loro lauorii fatto moltissimi prouedimenti di cera e di creta e a pittori disegnato moltissime cose; etiando chi auesse auute appare (a fare) figure grandi fuori dela naturale forma (ho io) dato le regole a condurle con perfetta misura.

* The figure of the warrior in the terracotta is nine and a quarter inches high; in

NOTES.

THE TOPOGRAPHY OF SPARTA AND THE BUILDING OF EPIMENIDES.

In his report on the excavations carried on by the School at Sparta in the spring in 1892, Dr. Waldstein says: "The most important discovery... was that of the circular building which I believe can, without a doubt, be identified with the building mentioned by Pausanias, III, 12–9, in the immediate neighborhood of the Skias," and which Pausanias says was thought to have been erected by Epimenides (2d half vII cent. B. c.). Dr. Waldstein regarded this discovery as of double importance, first on account of the circular form and early date of the structure, and, secondly, because it gives, finally, a fixed point of departure for the study of the topography of Sparta. The site was then, however, only partially excavated.

During the autumn of 1892, I undertook a topographical study of the site of ancient Sparta, which was finished in January, 1893, and is pubblished, as then written, in a previous number of the Journal (VIII, pp. 335–373). I here opposed the identification of this "circular" structure with the building of Epimenides, and for my reasons will refer to pp. 341–342. It seemed to me that it was the base of the colossal statue of Demos, described by Pausanias (III, 11, 9) as facing the Agora, and I predicted that "further excavation will reveal the fact that this was not a round platform, but a sort of semicircular retaining-wall, erected with the object of giving the huge image a secure and elevated position close to the Agora and overlooking it."

In the spring of 1893, the excavations were renewed, and the site of the structure entirely cleared, as is shown by the report of Mr. Meader in the Journal (pp. 410-428), with additional remarks by Dr. Waldstein. Neither writer questions the identification with the circular building of Epimenides. Dr. Waldstein continues to call the structure circular, and regards the identification as natural. Although Mr. Meader expressed no doubt, it seems to me that his careful report shows almost conclusively that this was (1) not a circular but a semi-circular structure, and (2) not a tholos, but a retaining-wall in the

¹ Thirteenth Annual Report of the Archaeological Institute of America, pp. 74-76.
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centre of whose radius a colossal statue stood, of which the base and one thumb have been found.

Mr. Meader states that it is undoubtedly a "retaining-wall," and in one case calls it semicircular. The plan as given in Fig. 17 is restored on the supposition of a circular structure. The fact is, however, that the wall, as it remains, is about a perfect semicircle directly facing the Agora. There is one small piece of wall, marked ll on the plan, which comes on the line which the old wall would have followed had it formed a continuous circle; but this bit of wall, according to the report, is very late, and the bricks and mortar used in it show that it does not belong to the original structure. It may be argued that, though there are now no traces of the continuation of the line of the semicircle, the other half of the supposed circle might at some time have been completely obliterated. A strong argument, however, against this, is the fact that at one end of the semicircle the wall stops without any sign of a break and is joined at an angle to a bit of contemporary wall which extends but a short distance when it is swallowed up in a little Byzantine church. The finish of the masonry at this point appears to exclude the coming in of another part of the segment of the circle. To sum up, there is no fact brought out in the Report which does not favor my hypothesis that we have in this structure the retaining-wall and base of the colossal statue of Demos. Of course this is of importance in the determination of the topography of Sparta.

N. E. CROSBY.

A PRIMITIVE DOME WITH PENDENTIVES AT VETULONIA.

I wish to call the attention of students of the history of architectural forms to the domical structure discovered by Cav. Falchi at Vetulonia, in the artificial tumulus called *La Pietrera*. A full account of the circumstances of its discovery, of the character and contents of the mound, and of the connection with surrounding examples and classes of tombs has been already given in Vol. viii, No. 4, of this Journal (pp. 620–29), as well as in this number, in the *News*. I will refer, therefore, for details, to these reports, which are condensed from Cav. Falchi's account in the *Notizie degli Scavi*.

The general features and arrangement of this hypogeum or domical tomb are analogous to a number of the Mycenæan funerary structures of the same kind. That is to say, it is built in the midst of an artificial mound, is reached by a long passage-way, has secondary chambers connected with it and is surmounted by a dome constructed of hori-

zontal overhanging courses of stone converging toward a central point and without a true domical construction of wedge-shaped courses.

The fundamental difference between these structures,—of which so many exist in Greece, and a few in Italy,—and this at Vetulonia, is that in the former the circular domical structure begins from the foundations, whereas at Vetulonia the ground-plan is square. A secondary difference is that in Greece the slant of the circular walls begins at once, whereas at Vetulonia the square walls are exactly vertical, until they reach the base of the dome, and this dome is not as acutely pointed as those in Greece.

In neither case have we a true dome, but in the Greek Mycenæan structure we have the prototype of the Pantheon, while at Vetulonia we have a forerunner of the Byzantine domes on pedentives—a far

more advanced type.

I have spoken of one structure, but in reality there were two chambers-one built over the ruins of the other. They are of equal dimensions and constructive form, so far as can be judged. The first chamber was built of Sassoforte granite which was not able to resist the pressure of the superincumbent earth and its dome fell in not long after construction: this is Cav. Falchi's opinion. On its strengthened walls the second chamber was built with slabs of Sassovivo stone with regularity and exactness and without the use of cement. This higher construction led to the raising and enlarging of the mound. Its vault had been partly demolished at some time in order to use its stones. The chamber is a square, measuring five metres, and the transition to the dome was managed by pedentives in the four corners which pass gradually from the square to the circular plan until they form a perfectly circular drum upon which the vault rests. Up to this pointa height of 3.70 metres—the walls are perfectly vertical. The large slabs of stone have a mean thickness of 20 cent.1

Just outside of the chamber, on either side of the corridor 14 met. in length, which leads to the outer edge of the artificial mound, is a smaller chamber. They both measure 2.40 met. in height, 1.90 met. in width and 3.10 met. in depth, and are covered with small domes, adjusted to the ground-plan in the same way as the main chamber.

¹ There is one point that at first seems to remain doubtful in Cav. Falchi's report, and that is one of extreme importance, namely: were there wedge-shaped stones used in the domes of either the first or second chambers, or were they, like the Mycenæan domes, constructed in strictly horizontal courses? The latter method was certainly the one employed. Cav. Falchi mentions wedge-shaped stones fallen from the earlier dome, but what he refers to is apparently the shape given by the diagonal cutting of the edges and the greater narrowness toward the face.

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The ground-plan of the mound and chamber given in fig. 1 is taken from the Notizie degli Scavi.

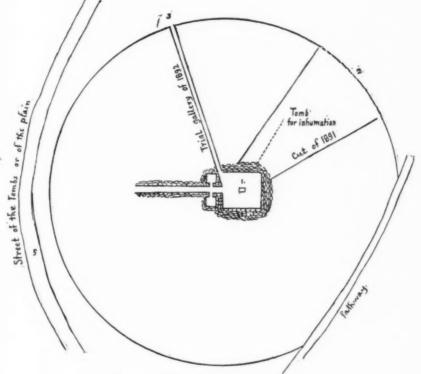


Fig. 1.-Mound of La Pietrera at Vetulonia.

It is generally agreed that the circular form is more ancient in Greece than the square or rectangular form of the sepulchral chamber. At the same time, there are many rock-cut tombs of the Mycenæan period in Greece with rectangular chambers. The Etruscans employed the rectangular chamber from the beginning. It seems as if the few exceptions to this rule were due to Oriental influence: such is the chamber at Quinto Fiorentino, which Helbig places before the close of the sixth century—how much before he does not say. The hypogeum at Vetulonia is certainly as early as the seventh century B. c. and it may be earlier. It is, therefore, about contemporary with such late Mycenæan domical tombs as that of Vaphio.

The question arises: what is the reason for the combination of the dome and the square plan in this instance. Practically speaking the dome imposed itself under the circumstances, for it was the only form of covering that could successfully withstand the pressure of the immense mass of superimposed earth. But for what reason was the dome attached to a rectangular chamber. Why was this additional risk run, why this added labor undergone? It was certainly an unnatural step to take. All tradition was in favor of the circular form. The incomers from the Orient—for such they must have been—settling among the natives, whose well-tombs at Vetulonia show a far inferior degree of culture, could hardly have been much influenced by this lower form of civilization. In fact the funerary deposits that are found in stone circles with central tombs at Vetulonia,—of which this one of the *Pietrera* is the largest, are, according to Cav. Falchi, unmixed foreign deposits, without a single Italic object.

There are two hypotheses to account for this use of the square plan. [I] The ancient Italian tomb-chamber was rectangular and the new comers on settling in Italy came under the spell of certain religious ideas connected with this form and therefore adopted it. [II] Or a more probable hypothesis is that the adoption of the square ground-

plan had an earlier origin, outside of Italy, in the Orient.

It is possible that when we know more of the history of the dome in the ancient Orient and also more about this mysterious people in Italy, we shall be able to connect the hypogeum at Vetulonia with the square halls in the Assyrian palaces surmounted by domes probably built on a more scientific plan than that of Vetulonia.

However we may attempt to explain it, the fact remains that it is a unique monument and deserves to be very carefully studied and measured. We hope that Cav. Falchi will publish it shortly in every detail, and until this is done it would be useless to include in further speculation.

A. L. FROTHINGHAM, JR.

REVIEWS AND NOTICES OF BOOKS.

Edward Robinson.—Museum of Fine Arts, Boston. Catalogue of Greek, Etruscan, and Roman Vases, by Edward Robinson, Curator of Classical Antiquities. Boston and New York, Houghton, Mifflin and Company, 1893.

"In the present catalogue the Museum of Fine Arts desires to offer to archæologists an exact description of the vases in its classical collection, and to the general public some assistance in learning to appreciate the qualities which give Greek vases an interest possessed by few classes of ancient monuments." These opening words of the preface of this admirable book acquaint us with the twofold task to which the author has applied himself, and which he has accomplished in a manner deserving the highest praise.

The introduction gives in fifty pages a clear and, considering its brevity, very satisfactory sketch of the history of Greek vases, a description of the process of their manufacture, and a list of Greek potters. The first and second sections are headed by well-chosen bibliographies, and notes in the text refer to authorities on special points. The second section is illustrated by six cuts, and a tail-piece represents a buffet with vases stacked upon it, from a wall-painting in Corneto. To the list of potters should be added the name of Hermokrates, a painter of the school of Epiktetos ('Eφ. 'Aρχ. 1890, pl. 2).

In the history of Greek vases there are few assertions to which it is difficult to assent, yet some statements seem to be made more positively than is warranted by the present state of knowledge. On page 3, Mr. Robinson says, speaking of the Hissarlik vases: "Whether made by the ancestors of the Greeks, or by a people closely affiliated with them, they certainly represent the earliest type of culture of the race to which the Greeks belonged," and, on the same page: "specimens of pottery of characteristics similar to the Trojan have been found in several of the islands of the Ægean and the eastern Mediterranean. . . . As a rule they are evidently not importations from a common source, but the independent products of a similar state of civilization by members of the same race. . . . Notable among these

are the earliest types found in Cyprus." These passages taken together seem to assume as a certainty that the inhabitants of Cyprus before the advent of the Phœnicians were not only closely related to the people of Hissarlik, but also to the ancestors of the Greeks. That this is at any rate not certain, is shown by Dümmler, Mitth. d. Inst. Athen, 1886, p. 243 sqq., who argues that the early Cyprians, and then also the people of Hissarlik, were Semitic. On page 8, we are told that the Dipylon style "did not disappear altogether until the end of the seventh century, if not later." If this means that the manufacture continued to 600 B. c., the date seems rather late in view of the fact that the earlier black-figured vases must now be put back well into the sixth century (Cf. Brueckner and Pernice, Mitth. d. Inst. Athen, 1893, p. 136 sq.). Whether the so-called Cyrene pottery is really from Cyrene may not be so certain as seems to be assumed on p. 16.

The "island" style is referred to on p. 2, and again p. 9, note 2, but is not described. One would expect to find it treated after the geometric style, but this is followed in order by the Rhodian, Melian, and Cyprian styles. As all these places are islands, those who make their acquaintance with Greek vases through the medium of this book might be tempted to form an "island" style by combining the Rho-

dian, Melian, and Cyprian.

The descriptions of the various styles and classes of vases are excellent, and note clearly the salient points. Nor, with the exception mentioned above, is there any fault to be found with the dates assigned, unless perhaps the dates 2000–1800 B. c. for the vases of Thera, and 1400–1100 B. c. for those of Mykenae may be somewhat too restricted.

On turning to the catalogue proper, those who are unacquainted with the Museum of Fine Arts will probably be surprised to find so large and excellent a collection. There are 896 numbers, including thirteen pieces of Armenian pottery, 144 pieces from Naukratis, and 116 fragments of various wares. There are no specimens of the Hissarlik pottery nor of that from Thera, but these are almost the only gaps in the collection, the contents of which may be briefly given, adopting the order of the catalogue, as follows: Case 1-Early Greek Styles; Nos. 1-6, Mykenae style; 7-14, Geometric; 15-18, Italic; 19-28, "Proto-Corinthian"; 29-77, Corinthian; 78-87, Miscellaneous. Case 1A—Prehistoric Italic Pottery, 88-100, Contents of a Prehistoric Grave in the Region of the Alban Lake. The grave is one of those which were buried under the volcanic deposits from the Alban craters (see Lanciani, Ancient Rome, p. 27 sqq.). 101-105, Contents of a Prehistoric Roman Grave, discovered on the Esquiline, within the wall of Servius Tullius, in the spring of 1888. The importance of the contents of

this case to students of prehistoric Roman and Italic archæology is evidently very great. Case 2-Vases from Cyprus, Nos. 106-239, part of a collection purchased from Gen. di Cesnola, giving good examples of almost all varieties of Cyprian ware, though unfortunately a few of the vases are very much "restored." Case 3-Bucchero Ware, 240-307, consisting for the most part of the Dixwell collection, "formerly a portion of a public collection in Chiusi, which was disposed of at public sale in Florence in 1875," offering very exceptional advantages for the study of this ware. Cases 4 and 5—Black-figured Vases, 308-387. Cases 6 and 7-Red-figured Vases, 388-488, among which are included six white Attic lekythoi, 448-453. Case 8-Vases from Lower Italy, 489-530; Megara Bowls, 531 and 533, and Miscellaneous late Greek types, 534-539. Nos. 540-578 are also miscellaneous late types. Case 15 contains Arrhetian ware, commonly miscalled Samian ware. Nos. 579-619, Nos. 620-623, are coarse Roman jars. The pottery from Naukratis, in case 15 of the Egyptian room, "was presented to the Museum by the Egypt Exploration Fund, and includes a liberal selection of specimens of the various types discovered during the excavations conducted by the Fund in the years 1884-87." This collection enables American students to become acquainted with all the varieties of Naukratis ware in the original. The latter part of the catalogue is taken up with fragments of various wares.

It is evident from the above summary that the Museum, besides possessing admirable collections of Cypriote, early Italic, and Bucchero wares, is exceptionally rich in Attic vases of the black- and red-figured styles. Many of these are unusually interesting. One of the white lekythoi, 448, derives special interest from its inscription, $\Lambda'_{i\chi\alpha}$ · $\kappa\alpha\lambda'_{i\delta}$, such inscriptions being extremely rare on vases of this class. The lekythoi 450–452 are published by Professor Wright in this Journal,

Vol. II, Pl. XI, Pl. XII-XIII, Nos. 7 and 9.

The colored frontispiece reproduces No. 432, a red-figured vase of the "fine style" representing the death of Orpheus. In the description, the figure at the extreme right is spoken of as being at the left, and vice versa. It would be well, too, in describing this painting, to mention the peculiar drawing which makes the right arm of some of the figures, notably the one to the right of Orpheus, appear to come from the left shoulder, and vice versa. In the description of 434 (p. 160, l. 6), three narrow bands twisted about the hair of a handmaiden are mentioned, but they do not appear upon the opposite page where the painting is published. Whether the description or the publication is at fault, cannot be determined at a distance. In general, the descriptions appear to be careful and exact. They are supplemented by nine full-page illustrations besides the frontispiece, and by a minia-

ture outline of nearly every vase. This last is an important addition to the value of the catalogue.

The paintings chosen for publication are all interesting for various reasons. 335 and 336, black-figured lekythoi from Eretria, have designs representing Helios rising in his chariot and Herakles with Pholos, respectively. 372 is a black-figured skyphos surrounded by a frieze, divided by the handles into two groups. One of these represents six warriors riding on leaping dolphins towards a full-draped man who stands facing them, playing on a double flute. The other represents six youths riding upon ostriches toward a similar fluteplayer, before whom stands a bearded dwarf. These are explained as chorus scenes from early Attic comedies, an explanation which must, perhaps, be provisionally accepted, though it is hard to imagine the successful production of such choruses at the date to which this vase must be assigned. 394 is a kylix conjecturally assigned to Euphronios. The painting in the centre represents Dionysos and a satyr. An inscription reads: ὁ παῖς καλός. The Museum is fortunate in possessing as a loan one of the ten vases signed by Euphronios, No. 388, a kylix with the representation of two-headed men dancing. The painting upon the stamnos 419 represents, in severe red-figured style, the murder of a harper by a youth, assisted by a woman, in the presence of two additional persons, one male and one female. It is explained as the death of Orpheus represented by means of motives belonging to the death of Aigisthos. Nos. 424, 426, 434, and 447, the subjects of the remaining full-page illustrations, represent, respectively, a group of satyrs, a youth accompanied by a dwarf leading a dog, a domestic scene (three women), and a youth and maiden before a grave stele, all in red-figured styles. The illustrations are well done.

It is to be hoped and expected that this book will not only serve to make archæologists better acquainted with the great value of the collection of vases in the Museum of Fine Arts, but will also by means of the masterly introduction awaken a more general interest in the study of ancient ceramics.

HAROLD N. FOWLER.

Adolf Furtwängler. Meisterwerke der Griechischen Plastik. Kunstgeschichtliche Untersuchungen von Adolf Furtwängler. Mit 140 Textbildern und 32 Lichtdrucktafeln in Mappe. 8vo. pp. xvi, 767. Verlag von Giesecke und Devrient. Leipzig-Berlin, 1893.

This work is certainly a magnum opus, full of original conceptions, of careful observation, and of diligent comparisons. It is a veritable

storehouse of learning. The attractive blue-and-white binding, in which it comes to us from the hands of the publishers, and the high quality of the illustrations, are an indication that the volume is intended to find its way into the libraries of wealthy art amateurs. But the text is in no sense addressed to the general public; it is a scientific treatise of the highest order, the fulcrum around which historical criticism of Greek sculpture must swing for many years to come. With this book in hand Overbeck becomes a representative of archaic criticism. So comprehensive is the range of Furtwängler's acquaintance with Greek and Roman marbles, bronzes, terracottas, vase-paintings, texts and inscriptions, that even Brunn seems to occupy a narrower field of influence. Leipzig and Munich are already overshadowed by Berlin.

It would be idle to attempt a critical review of a work of this magnitude. This can be done only by specialists, and at much greater length than we have at our disposal. But we may at least set before our readers Furtwängler's general point of view and give a brief notice of the scope of his book.

The foundation upon which this work rests is a personal and direct observation of monuments and a critical comparison of them through the assistance of casts and photographs. Again and again we are impressed by the freedom of Furtwängler's powers of observation. None of the details of style escape his attention. Whether it be the treatment of the hair, of the eye, nose, mouth, ear, the drapery or general composition, he has observed them all, and frequently suggests some illuminating generalization, utilizing every such detail for chronological purposes with as much security as the epigraphists feel in the chronological value of the forms of letters.

But the masterworks of Greek sculpture, the subject of his volume, have almost without exception perished. How, then, does he use the methods of observation to so much purpose? We might suppose that the few existing Greek originals would be made the basis of his argument and afford the criteria for the classification and restoration of the missing masterpieces. But such a slender foundation would not have sufficed for the superstructure he wishes to raise. His real starting-point is found in the numerous copies made by the Romans of the famous statues of the Greeks. He argues that when many replicas of the same type are found, we may assume as a starting-point a Greek original. In the critical analysis of the copies great pains must be taken to distinguish between those which are exact copies and those which contain later variations. In the absence of the originals, we must here be guided in our estimate of the exactness of the copy by such other originals as have been preserved, by

traditional descriptions, by contemporary copies on vase-paintings, coins, etc. In this manner from the copies we may reconstruct the originals.

This is the first time that in a systematic, far-reaching and extensive manner the lost masterpieces of the Greeks have been placed before our eyes; in copies it is true, but in a manner which enlarges our conceptions respecting the styles and peculiarities of the great artists. It also vivifies our interest in a multitude of monuments which otherwise would be overlooked as of secondary importance.

The volume is divided into a series of separate studies upon: Pheidias; The Athena Temple on the Akropolis; Kresilas and Myron; Polykleitos; Skopas, Prakiteles and Euphranor; The Venus of Milo; The Apollo Belvedere; An Archaic Greek bronze head; The Throne of the Amyklæan Apollo. Even this analysis does not completely cover the scope of the work, for the works of many other artists are considered at length, whose names do not appear in the titles of the chapters. These studies are not systematic treatises, such as one expects to find in an encyclopædia or in a history of Greek sculpture; they are critical studies, in which traditional and received opinions are treated lightly but the monuments with great analytic acumen.

The starting point for his study of Pheidias is the Lemnian Athena. This he recognizes in two marble copies in Dresden, and secures a more exact restoration of the head by means of an Athena head in Bologna, and of the pose by means of an ancient gem. He then fixes its position on the Akropolis, determines its date as 450 B. c., discusses its prototypes and the changes made by Pheidias. This statue becomes the norm by means of which he reaches conclusions which vary widely from the generally received opinions. He places the Lemnian Athena at the beginning of the career of Pheidias, allowing a few works only to be of earlier date. This would do away entirely with the Kimon period and place Pheidias exclusively in the age of Perikles. The Athena Promachos is attributed to Praxiteles the elder, the Olympian Zeus is put later than the Parthenos, and the residence of Pheidias at Olympia treated as a myth. The decorative sculptures of the Parthenon, with the exception of the more archaic of the metopes, are assigned to Pheidias. He interprets the Eastern frieze as representing the bringing of the Peplos for the ancient statue of Athena, which he believes Perikles intended to have placed in the Eastern section of the Parthenon. The stools which the maidens are carrying are intended for the Olympian divinities who were considered as guests at the great Panathenaic Festival. They are seated in the following order: Hermes, Dionysos (on a cushion), Demeter (with

a torch), Ares, Hera, Zeus, and to the right Athena, Hephaistos, Poseidon, Apollon, Artemis, Aphrodite. The Western Pediment of the Parthenon is interpreted as dedicated to the Parthenoi; that is, the daughters of Kekrops on the one hand and of Erechtheus on the other. The figures in the angles are not river gods, but Buzyges and his wife on one side and Butes and his wife on the other. In the centre Athena and Poseidon meet as rival rather than as conflicting divinities, both of them being associated, as is the case with all the other figures of the pediment, with the history of the Akropolis. The Eastern Pediment receives also a new interpretation. The central group, in which Zeus and Athena appear as equal divinities, is restored from the Madrid puteal-to the left are Helios, Kephalos, the Horai, Hebe (two other divinities, then Hera and Zeus); to the right are (Athena, Poseidon, two divinities) the Moirai and Nyx. Thus in both pediments there is seen to be preserved a more thorough balance and symmetry than appears in most interpretations. In the study on Polykleitos, the recent discoveries of the American School at Argos are summarily dismissed as non-Polykleitan in style. Around the Doryphoros and the Diadumenos he collects a series of variant forms, and in a most interesting manner utilizes the bases found at Olympia in reëstablishing as Polykleitan a series of statues. In the same way as the zoölogist from a single bone can reconstruct the form of an extinct animal, so the archeologist of to-day requires even less than the fragment of a statue: the mere manner in which the feet are posed upon the pedestal throws considerable light upon the form of the statue which the pedestal once served to support. In the section on Praxiteles a new light is thrown upon the work of the master; his earlier statues, more Polykleitan in character, being distinguished from the later, of which the Hermes is the crowning example. Few perhaps will be ready to follow Furtwängler so far as to see in the Otricoli Zeus the direct influence of Praxiteles. The section on the Venus of Milo is a very thorough archeological and critical study, leading to the unexpected conclusion that the Melian statue represents a mixture of two types, one of which is to be referred to Skopas, the other being the Melian Tyche.

The fine series of plates which accompanies the volume is valuable in reproducing works of sculpture which are not elsewhere accessible.

ALLAN MARQUAND.

J. T. Bent. The ruined cities of Mashonaland, being a record of excavation and exploration in 1891, by J. Theodore Bent, etc.; with a chapter on the Orientation and Mensuration of the Temples, by R. M. W. Swan. 8vo., pp. xi, 376. London, 1892, Longmans, Green & Co.

Mr. Bent is one of the most energetic of the travellers and explorers of this generation. His researches among the Greek islands and on the Bahrein group off Arabia had already placed him in the front rank, and recently, in his expeditions to the region of the ancient gold mines of Mashonaland, in South Africa, and in his more recent expedition into Abyssinia, he has scored two distinct successes. Elsewhere in the News of this Journal (vol. VII, p. 491, VIII, p. 254), accounts have been already given of the results of his investigations and their historic and archæological bearings. The present volume is divided into three parts: Pt. I, On the road to the ruins, being an account of the journey up from Vryberg through Bechuanaland by the Kalahari desert route, then of the first impressions of Mashonaland, and, finally, of the camp life and work at Zimbabwe. The archæological part of the work is reached in Part II, which is devoted to the archæology of the ruined cities.

"The ruins of the Great Zimbabwe (which name I have applied to them to distinguish them from the numerous minor Zimbabwes scattered over the country) are situated in south latitude 29°, 16′, 30″, and east longitude 31°, 10′, 10″, on the high plateau of Mashonaland, 3,300 feet above the sea level, and form the capital of a long series of such ruins stretching up the whole length of the western side of the Sabi river. They are built on granite, and of granite, quartz reefs being found at a distance of a few miles. The prominent features of the Great Zimbabwe ruins, which cover a large area of ground, are, firstly, the large circular ruin with its round tower on the edge of a gentle slope on the plain below; secondly, the mass of ruins in the valley immediately beneath this; and thirdly, the intricate fortress on the granite hill above, acting as the acropolis of the ancient city."

The circular ruin has an elliptical shape, with a greatest length of 280 ft., a wall at its highest point of 35 ft., and with a greatest base thickness of 16 ft. The wall is constructed of small stones a little larger than bricks, laid without cement or mortar, in perfectly true courses. The S. E. portion of the outer wall is decorated with a pattern in low relief coinciding with the position and limits of the sacred enclosure inside, and the top of the same section of the wall was made into a promenade, paved with slabs of granite and decorated with large monoliths. The interior is a perfect labyrinth. A stupendous

narrow passage leads from the main entrance to the sacred enclosure, on either side of which rise the great walls, thirty feet high, "built with such evenness of courses and symmetry that, as a specimen of the dry builder's art, it is without a parallel." Buttresses and portcullises defended the entrances and passageways at every point. Within the sacred enclosure stood two round towers of conical shape, but unequal height, the larger being 35 ft. high. Such towers, or colossal cones, are known to have been erected by the Phænicians within their temple precincts: examples can be cited in Phænicia, Malta, Sardinia, etc. No cemetery was found in connection with Zimbabwe, and Mr. Bent's conclusion was "that the ancient inhabitants, who formed but a garrison in this country, were in the habit of removing their dead to some safer place. This plan seems to have a parallel in Arabia in antiquity, a notable example of which is to be found in the Bahrein Islands, in the Persian Gulf, where acres and acres of mounds contain thousands of tombs, and no vestige of a town is to be found anywhere near them."

The fortress is even more remarkable. Its wall is thirty feet high in parts, and the flat causeway on the top was decorated on the outside edge by a succession of small round towers alternating with tall monoliths. "The labyrinthine nature of the buildings . . . baffles description." Every imaginable precaution against attack was taken in the way of buttresses, tortuous and narrow passages and traverses. There was a temple at the S. W. end, containing an altar, around which were found phalli, birds on soapstone pillars and fragments of soapstone bowls. Gigantic granite boulders, some over fifty feet high, are strewn over the summit. Mr. Bent closes his description with these interesting sentences: "Such is the great fortress of Zimbabwe, the most mysterious and complex structure that it has ever been my fate to look upon. Vainly one tries to realize what it must have been like in the days before ruin fell upon it, with its tortuous and wellguarded approaches, its walls bristling with monoliths and round towers, its temple decorated with tall, weird-looking birds, its huge decorated bowls, and in the innermost recesses its busy gold-producing furnace."

The ruin of the great circular building at Matindela is second only in importance to the Great Zimbabwe. All the other ruins visited by Mr. Bent, or reported to him, are far inferior and do not merit the same attention.

The large number of similar ruins, in each case found near gold workings, proves that an extensive population once lived here as a garrison in a hostile country for the sake of the gold which they extracted from the mines in the quartz reefs between the Zambesi and

Limpopo rivers. All were built by the same race and belong to the same period. The ruins are circular or elliptical in shape, and an interesting feature in nearly all of them is the ornamental pattern encircling only a portion of the outer wall—facing the southeast. It is probable that this fact had a religious significance and was connected with solar worship. The buildings served both as temple and as fortress.

The chapter by Mr. Swan, On the Orientation and Measurements of Zimbabwe Ruins, is an attempt to prove that at Zimbabwe, in connection with the worship of the sun and the reproductive power, several methods were employed for observing the motions of the heavenly bodies, in order to use this knowledge in regulating the celebration of religious festivals and the ordinary affairs of life. According to Mr. Swan, the structure, orientation and various openings of the Zimbabwe structures were made to subserve this purpose. His principal measurements are for the purpose of calculating the radius of the arc of different sections of the walls, and in order to ascertain how the rays of the rising sun would penetrate into the interior at the summer solstice. There does not seem to be a sure enough basis of facts for the conclusions drawn in this chapter, nor do the other ruins of the country furnish strictly concordant data.

The following chapter is on The Finds at the Great Zimbabwe Ruins. Of these the most remarkable are the hawks or vultures perched upon tall columns, of soapstone. These birds, found around the altar, were, according to Mr. Bent, sacred to Astarte. In connection with these were found: phalli, some of them decorated; decorated soapstone beams, with a geometric ornamentation like that on early Cypriote pottery; fragments of large soapstone bowls, some of which have frieze-like scenes in relief, processions of animals, hunting-scenes, religious processions, geometric patterns, etc. Close underneath the temple in the fortress stood the gold-smelting furnace, made of very hard cement, of powdered granite, with a chimney of the same material, and with neatly bevelled edges. Near it were many little crucibles, of a composition of clay, which had been used for smelting the gold, usually with specks of gold still adhering to the glaze. There were also water-worn stones used as burnishers, an ingot mould of soapstone corresponding almost exactly to a Phenician ingot of tin found in Falmouth Harbor.

Chapter VII deals with *The Geography and Ethnology of the Mashonaland Ruins*, and gives a sketchy account of the past knowledge of this region down to the time of Mr. Bent's visit.

The third and last part of the book treats of Exploration Journeys in Mashonaland, which refer only incidentally to archeological matters.

Mr. Bent here throws some light upon the Monomatapa Empire which flourished in this region several hundred years ago.

At present Fort Salisbury is the centre of a new English enterprise and is the future capital of the Mashonaland gold fields redivivi.

A. L. F., JR.

F. J. Bliss. A mound of many cities, or Tell el Hesy excavated, by Frederick Jones Bliss. 8vo., pp. XII, 197. New York, Macmillan & Co., 1894. Price, \$2.25.

The task of excavating the mound of Tell el Hesy, in Palestine, 16 miles E. of Gaza, and 23 miles W. of Hebron, was commenced by Mr. Flinders Petrie in April, 1890. In his "reconnaissance of six weeks, during which he examined the tell merely at its sides, he was able to reconstruct its past history from the apparently unimportant remains he found, and to reach conclusions which my (Mr. Bliss') detailed examinations through four seasons . . merely modified, but did not materially alter." Mr. Petrie has reported on his own work in his publication, "Tell el Hesy" (Lachish), published in 1891, for the Palestine Exploration Fund. During 1891, 1892 and 1893, Mr. Bliss carried forward the work on a quite different scale, cutting down one-third of the mound, layer by layer. He agrees with Petrie and Conder in identifying the site with the city of Lachish: in fact, it was through his discovery of the cuneiform tablet with the letter containing the name of Zimridi, governor of Lachish, that the strongest argument in favor of the identification was secured.

Mr. Bliss' conclusions are that some 2000 B. c. the Amorites built a town on this bluff, some 60 ft. above the stream-bed of the Wady el Hesy, and on the ruins of this city their successors built another and then another, until about 400 B. c., when the site seems to have been abandoned, the ruins of the last inhabitants being 60 ft. above the ruins of the first builders, with a series of six intermediate towns, each represented by a separate layer: in all eight layers. The dates assigned by Mr. Bliss to the various towns are the following: City Sub 1, 1700 + B. c.; City 1, c. 1600 B. c.; City Sub 11, c. 1550 B. c.; City II, c. 1500; City III, c. 1450; City Sub IV, c. 1400; City IV, c. 1300-1000; City v, c. 1000; City vi, c. 800; Cities vii, viii, c. 500 and 400 respectively. The earliest three or four settlements were evidently the largest and most important, the later settlements being confined to the small area of the tell, a good part of which, however, has been anciently undermined and carried away by the stream. Bliss' main excavation area was 160 ft. N.-S. and 125 ft. W.-E. The most inter-

esting ruins of the earliest period were the great city walls, 16 ft. thick and having great corner towers, 56 by 28 ft., with rooms about 10 ft. square. The early pottery, called Amorite by Mr. Petrie, occurs in City Sub and I, while the Phænician pottery begins to appear in City II, running through City IV. In City II was an interesting blastfurnace. In City III was found the famous Cuneiform tablet of Zimrida. Several scarabs of the xvIII Egyptian dynasty were found in Cities II and III. City IV also has XVIII-dynasty scarabs, with a XIXdynasty scarab toward the top, near which were found a cylinder with XXII-dynasty glazing and a Phœnician inscription of about 1100 to 1000 B. C. Near by was a stamped jar-handle inscribed in hieroglyph, "The palace of Ra-aa-Khepuru," that is, Amenhotep II. In City Sub IV were found an Egyptianizing bronze statuette and an extremely rude terracotta female statuette: also a wine-press (c. 1200 B. c.) in excellent preservation. A fine public building with a symmetrical plan was found. It was 56 ft. square, and its largest room measured 30 ft. by 15. In this stratum Mr. Petrie had found a building with the two famous door-jambs, each bearing a pilaster in low relief, terminating in a volute in place of a capital. Many of the objects found in these two strata have an Egyptian character-which adds to the testimony of the scarabs. At the same time these strata represent the principal age of Phœnician pottery. In City v a very peculiar and interesting building was found, covering an area of 112 ft. by 45, and apparently formed of three halls divided into three aisles by two rows of brick piers or columns. The characteristic pottery of Cities v to VIII was the Jewish, i. e., coarse copies of the older Phonician types; and "polished red and black Greek ware appeared from the top of the tell down to the higher layers of City vi." Of the last chapters, entitled "Sketch of the Expedition," and "The Arabs and the Fellahin," it is not necessary to speak, though they add greatly to the interest of the book. Certainly the archæological results of the excavations are interesting, but they are disappointing, in so far as they relate to the history of art, from the extreme insignificance of the objects found.

A. L. F., Jr.

ARCHÆOLOGICAL NEWS.

SUMMARY OF RECENT DISCOVERIES AND INVESTIGATIONS.

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AFRICA.

EGYPT.

The past season is an important one in the annals of Egyptian archæology, not so much for the number as for the quality of the undertakings.

After a number of minor enterprises, the Egypt Exploration Fund has once more come to the front with its excavation of the temple of Hatshepu, under the direction of M. Naville, which promises to surpass in monumental interest even the excavations of the Fund at Bubastis. M. de Morgan's discoveries at Abusir and Dashour are of great interest, and the latest news from Dashur, which came too late to be inserted in this number, shows that no more important find for our knowledge of the art of the Middle Empire has yet been made.

The project of the Fund to conduct a complete archæological survey of Egypt, which is still carried on, has stimulated the activity of the indefatigable M. de Morgan, who has already issued Part I of what promises to be the greatest work yet issued on Egyptian Monuments, and in connection with which he is carrying on, and will continue to carry on, important excavations like those reported in this issue of the *News*.

Mr. Petrie's work at Koptos promises to be unique in its value for the earliest period of Egyptian civilization.

At the last moment we hear that a large appropriation has been made by the Egyptian government for the erection of a suitable and safe museum building.

THE MONUMENTS OF ANCIENT EGYPT.—We here reprint part of the circular announcing the publication of the great work on the monuments of Egypt, undertaken by the French archæologists under the direction of M. de Morgan. Its title is: "Catalogue des monuments et inscriptions de l'Égypte antique. Ouvrage publié sous les auspices de S. A. Abbas II Helmi, Khédive d'Égypte, par la direction générale des antiquités de l'Égypte." The first section of the book, of which part I has just appeared, has the sub-title: "Première série: haute Egypte. Tome premier: de la frontière de Nubie a Kom Ombos. Par J. de Morgan, U. Bouriant, G. Legrain, G. Jéquier, A. Barsanti."

The circular says: La publication dont le "Service des Antiquités de l'Égypte "
donne aujourd'hui le premier volume, est destinée à renfermer la description complète de tous les monuments, de tous les sites de l'Égypte antique, ainsi que la reproduction fidèle de toutes les inscriptions de la vallée du Nil quelle que soit la langue
dans laquelle elles ont été rédigées.

Autant que ses ressources le lui permettent, le "Service des Antiquités de l'Égypte" fait déblayer les édifices afin de mettre à jour les textes qui en recouvrent les murailles et d'en pouvoir donner une description complète. Mais fréquemment arrêté par des impossibilités matérielles, il doit souvent se contenter d'effectuer les travaux les moins dispendieux et de laisser pour l'avenir un grand nombre de monuments et plus particulièrement de tombeaux qui n'ont pas encore vu le jour depuis l'antiquité.

Sous le titre de "Catalogue des monuments et inscriptions de l'Égypte antique" cet ouvrage comprendra tous les documents archéologiques actuellement visibles dans la vallée du Nil et dans toutes les régions où les Pharaons ont laissé des témoins de leur puissance. Il embrassera tout ce que nous connaissons depuis les âges préhistoriques et ceux des souverains des premières dynasties jusqu'aux derniers restes de la civilisation byzantine, au moment où les arts, les usages et la langue des Arabes s'établirent dans le pays et firent à jamais disparaître la vieille Égypte. Cette publication sera forcément incomplète, car chaque année les fouilles améneront la découverte de monuments nouveaux, mais il sera facile de créer des volumes supplémentaires et de tenir ainsi cet ouvrage au courant des progrès de l'archéologie en Égypte.

Les monuments seront décrits très sommairement, mais ces descriptions seront accompagnées d'un grand nombre de plans, de coupes et de vues, afin d'en faciliter l'étude au point de vue de l'architecture. Les textes seront reproduits le plus souvent en fac-simile afin d'en conserver les caractères paléographiques. Mais dans aucun cas il n'en sera donné de traduction, afin d'éviter autant que possible que cette publication devienne un champ de polémique et pour en abréger la rédaction. Les égyptologues qui participeront à ces travaux seront toujours à même de publier dans des ouvrages séparés la traduction et la discussion des textes, d'exposer leurs théories et leurs appréciations personnelles. Mais le Service des antiquités de l'Égypte ne peut embrasser une publication d'une aussi grande étendue. Il serait débordé par l'abondance des mémoires et n'atteindrait jamais son but.

Le "Catalogue des monuments et inscriptions de l'Égypte antique" ne comprendra que les documents qu'il est possible de qualifier d'"immeubles", c'est-à-dire tous ceux qui ne peuvent ou ne doivent être transportés. Les monuments transportables qui sont aujourd'hui dans les musées du Caire et d'Alexandrie de même que ceux qui dans la suite y seront déposées feront l'objet d'une publication spéciale sous le titre de "Catalogue des Musées Archéologiques de l'Égypte".

Maintenant que les textes n'ont plus de secrets, que grâce aux efforts incessants d'une pléiade de savants l'égyptologie est devenue une science précise, l'intérêt d'une publication complète des monuments se fait très vivement sentir. Chaque année, depuis plus d'un demi siècle, de nombreux étrangers, attirés par la richesse des documents de la vallée du Nil, viennent s'y instruire et y prendre des notes, souvent sans ordre et sans méthode, et les publient dans les revues de leur pays. Dans bien des cas ces documents sont pour ainsi dire perdus pour la science; car leur recherche au milieu de publications si nombreuses devient un labeur considérable, et la connaissance de la bibliographie égyptologique est presqu'aussi difficile que l'egyptologie elle-même. A côté de ces notes, de ces brochures pour ainsi dire innombrables, sont, il est vrai, de grandes publications et des monographies détaillées qui font le plus grand honneur à leurs auteurs. Mais il est bien peu d'ouvrages qui soient complets, souvent ils ne renferment qu'un choix de documents fait suivant les idées personnelles de l'auteur, en vue de la recherche d'une question spéciale.

En dehors de cet inconvénient très grave pour les savants qui travaillent en dehors de l'Égypte, il en est un autre non moins sérieux pour les égyptologues qui parcourent la vallée du Nil. La plupart des textes aujourd'hui visibles ayant été plus ou moins signalés ou publiés, il est fort difficile de savoir quels sont les monuments inédits, et ce désordre entraîne une grande perte de temps et d'activité de la part des visiteurs de l'Égypte.

Le "Catalogue des monuments et inscriptions de l'Égypte antique " renfermant tous les documents connus jusqu'au jour de sa publication, il sera dès lors aisé de se rendre compte de la valeur scientifique d'un monument, de l'intérêt d'un document nouvellement découvert.

En dehors de ces avantages surtout sensibles pour les archéologues qui visitent l'Égypte, les savants que leurs occupations retiennent à l'étranger trouveront aussi leur bénéfice dans cette publication qui leur fournira une foule de documents inédits

pour alimenter leurs travaux.

Il ne serait pas juste de penser que les sociétés, les revues, qui font de l'égyptologie leur principal sujet d'études, seront absorbées par cette publication et réduites à l'impuissance. Bien au contraire elle leur vient en aide, car chaque année les nouveax volumes leur apporteront des documents inédits laissant aux savants étrangers le soin de les discuter et de les traduire. Plus tard, quand ce long travail de relevé sera terminé, les volumes de supplément fourniront périodiquement les résultats des récentes découvertes, et cette série réunie aux catalogues scientifiques des musées égyptiens constituera à proprement parler "les annales de l'antiquité égyptienne". Il est vrai que les nombreuses collections des musées étrangers n'y seront comprises. Mais il sera toujours aisé pour les directeurs de ces musées de faire la description de leurs collections dans des publications analogues, et l'histoire de l'Égypte sera ainsi, à tout jamais, sauvée de la destruction.

Le nombre des égyptologues est fort restreint; c'est à peine si à ce jour nous en pouvons compter cinquante, et sur ce petit nombre, beaucoup ne peuvent venir en Égypte, retenus qu'ils sont par leurs devoirs à l'étranger. C'est donc avec le concours de quelques savants seulement que notre œuvre peut être entreprise. Mais nous ne saurions trop inviter les étrangers à venir collaborer à ce travail d'un intérêt

si général. Il ne s'agit pas ici d'un ouvrage ayant une portée politique, mais bien d'une œuvre internationale, intéressant la science universelle et dans laquelle la nationalité des auteurs importe peu.

Afin de faciliter aux égyptologues de toutes les nationalités la part que nous espérons leur voir prendre dans cette publication, nous acceptons les manuscrits écrits dans les quatre langues principales de l'Europe: l'allemand, l'anglais, le français et l'italien, priant les savants qui ne sauraient écrire dans l'une de ces langues de rédiger leur texte en latin.

Le Service des antiquités ne prend sur lui aucune responsabilité relativement à la valeur scientifique des ouvrages, chaque auteur publiant sous son nom est personellement responsable de ses œuvres. Il en corrigera lui-même les épreuves. Il nous serait en effet impossible de vérifier toutes les copies, d'examiner à fond chacun des mémoires.

Nous espérons que cet appel à la bonne volonté de tous les savants sera entendu et que chaque année nous verrons des égyptologues de toutes les nationalités venir concourir à cette œuvre. Il en résultera, nous en sommes certains, une émulation très bénéficiable aux intérêts de la science.

Le "Catalogue des monuments et inscriptions de l'Égypte antique" comprendra la description de tous les pays qui jadis firent partie du domaine des Pharaons. Mais il était nécessaire de diviser le sujet afin d'être à même de l'aborder de plusieurs côtés à la fois: nous avons donc partagé ces vastes régions en provinces, quitte à diviser les provinces elles-mêmes en districts suivant les besoins. Nous avons établi les divisions suivantes pour les provinces: 1° Haute Égypte. 2° Moyenne Égypte. 3° Basse Égypte. 4° Nubie. 5° Les Oasis. 6° Les côtes de la Mer rouge. 7° L'Égypte asiatique.

L'examen de ces sept provinces peut être mené de front, mais afin qu'il ne s'introduise pas de désordre dans la publication, il est nécessaire de fixer à l'avance le point de départ de chacune des séries de volumes, autrement dit le district par lequel les études seront commencées dans chaque province.

1° Haute Égypte.—La série commence à la frontière de Nubie et les matières se suivront en descendant le cours du fleuve.

2° Moyenne Égypte.—Cette province aura pour frontière au Sud la limite méridionale de la Moudiriéh de Siout et ou Nord la limite septentrionale des Moudiriéhs de Beni Souef et du Fayoum. Les volumes se succèderont également en suivant le cours du Nil.

3° Basse Égypte.—Cette province comprend tout le Delta, depuis la frontière indiquée ci-dessus pour la Moyenne Égypte. Elle est limitée à l'Est par le canal de Suez, à l'Ouest par le désert.

4º Nubie.—Pour la Nubie l'ordre sera inverse, la situation politique de ce pays ne permettant pas de commencer les travaux au Sud de Wadi Halfa. Le premier volume comprendra donc l'île de Philé et le travail se fera en remontant le cours du Nil.

5º Les Oasis.—Cette province comprend la vaste région comprise entre la frontière de la Tripolitaine et la Mer méditerranée au Nord, les sables du désert à l'Est et à l'Ouest. Au Sud sa frontière dépend des conditions politiques du Soudan. Il semble donc rationnel de commencer les travaux par le Nord, c'est-à-dire par l'Oasis de Siwah ou d'Ammon.

6° Les côtes de la Mer rouge.—Cette série comprendra tout le littoral de la mer, depuis Suez jusqu'à Souakin et au-delà. Elle renfermera également les vallées qui partant du désert viennent déboucher sur la côte.

7° L'Égypte asiatique—comprenant tous les territoires égyptiens situeés à l'Est du canal de Suez, le Sinaï et le désert voisin de la frontière de Turquie. Cette série aura pour point de dêpart les pays situés aux environs de Péluse, en face de Port Saïd.

Le désert situé à droite et à gauche de la vallée du Nil sera décrit dans la 5° et la 6° série avec les oasis et les côtes de la Mer rouge.

Ainsi tracé dans ses grandes lignes le travail est parfaitement défini, il peut être commencé en sept points différents à la fois, chaque région présentant ses avantages et ses défauts. Ainsi le relevé de la Nubie et de la Haute Égypte ne peut être fait par des Européens que pendant la saison froide, tandis que le climat de la Basse et de la Moyenne Égypte permet de travailler en toute saison.

L'une des grandes difficultés que nous rencontrons dans l'accomplissement de ce travail est le défaut de cartes figurant avec exactitude les montagnes qui bordent la vallée du Nil. Car, la majeure partie des antiquités se trouvant en dehors de la vallée, il est indispensable de compléter les cartes actuelles pour y pouvoir marquer la position des sites antiques.

Le "Catalogue des monuments et inscriptions de l'Égypte antique" comprendra la publication in extenso de tous les monuments connus jusqu'à ce jour. Les publications antérieures seront révisées et corrigées s'il y a lieu. Elles seront reproduites sous le nom de leur auteur, chacun de nos collaborateurs signera ses travaux ou indiquera dans une notice sommaire les corrections qu'il a cru devoir faire subir aux textes déjà publiés.

Palais de Gizèh (Caire), le 15 juin 1893.

Le Directeur Général des Antiquités de l'Egypte J. DE MORGAN.

PETRIE'S HISTORY OF EGYPT.—Messrs. Methuen will bring out soon Prof. Petrie's "History of Egypt, from the Earliest Times to the Hyksos." It is the first instalment of a history of Egypt in six volumes, intended both for students and for general reading and reference. In the earlier periods every trace of the various kings will be noticed, and all historical questions will be fully discussed. The special features will be that the illustrations will be largely photographic, or from facsimile drawings, and, so far as practicable, of new material not yet published; that references will be given to the source of each statement and monument, thus affording a key to the literature of the subject; and that lists are supplied of all the known monuments of each king. The second volume will cover the eighteenth to the twentieth dynasty; the third the twenty-first to the thirtieth dynasty; the fourth will be devoted to the Ptolemaic rule; the fifth to Roman rule; and the sixth to Mohammedan rule. This last will be written by Mr. Stanley Lane-Poole.—Athenæum, March 24, 1894.

EGYPTIAN GARDENS.—Prof. Charles Joret, of Aix, read a paper at a meeting of the Acad. des Inscriptions (Oct. 27) on Egyptian Gardens. As early as the xviii dynasty, the texts and monuments show that the gardens included orchards with water basins for watering and

with abundance of fruit trees. Under the Ptolemies the gardens were enriched with a large number of decorative plants and flowers, heretofore unknown in Egypt, which transformed them into elaborate flower gardens.—Rev. Arch., 1894, I, p. 112.

NEGROES AND WHITES IN PRIMITIVE EGYPT.-Mr. Boscawen has some remarks in the Babylonian and Oriental Record on the mixture of the white and negro races in the earliest period of Egyptian history as shown by Mr. Petrie's excavations in the necropolis of Medun (III Dyn.). The burials show the existence of two races, an aboriginal and a colonist population, the one gradually erasing or modifying the former. The burials in a crouching attitude, as attested by the skeletons in the Museum of the College of Surgeons (London), are distinctly those of a negro population, while the mummied bodies are of a Europo-Asian type. The examination of these remains by Dr. Gaston reveals, however, another important feature-namely, that the two races must have lived together for some time and that intermarriage was beginning to affect the higher type. This is particularly noticeable in the case of the statue of Ra-hotep, in the Museum of Gizeh, where we have many traces of the infiltration of the negro element in this official, who had risen from the ranks and married a woman of the pure dynastic Egyptian type. Upon ethnologic grounds, the entrance of the dynastic white Egyptian into the Nile Valley must considerably antedate the pyramid age.

Mr. Boscawen finds reason to believe that the south of Arabia is the point of convergence of ancient culture, and that its trading communities are the source of the dynastic Egyptian civilization and the Babylonian culture of Eridu—the earliest Babylonian city. The parallels between these two civilizations are appearing ever more marked. The circumstances of the foundation, by emigrants, of Eridu in Babylonia, and This, or Abydos, in Egypt, in the midst of an aboriginal population of lower civilization, are very similar. If, then, Arabia is the source of both emigrations, it becomes extremely important to carry on the work begun by Doughty, Euting and Glaser.

INSPECTORS OF MONUMENTS.—It was announced at a meeting of the Society for the Preservation of the Monuments of Ancient Egypt, on February 23, that M. de Morgan had informed them through the Foreign Office that two official Inspectors of Monuments had been appointed, one a Frenchman, M. Foucard, the other a native of Egypt, Ahmed Effendi Najib, each of whom was to have alternate charge of Lower and Upper Egypt. Provision was also made for twelve sub-inspectors.—London Times, Feb. 24.

THE BOOK OF THE DEAD .- In the December number of the New Review, there is an article by M. Marsham Adams entitled "The Mystery of Ancient Egypt," in which he puts forth the theory that the Great Pyramid, more particularly in its internal arrangements, symbolises the doctrines contained in the "Book of the Dead," in the order in which those doctrines are presented in the Turin papyrus. In the February number of the Babylonian and Oriental Record, Mr. A. C. Bryant shows the fallacy of such a theory for several reasons. (1) The Book of the Dead is not an organic whole; there was no recognized order or fixed number of chapters. (2) The arrangement in the Turin papyrus is quite late. One of Mr. Bryant's arguments, however, is quite fallacious. For reasons too long to recapitulate, he says that the identification of the deceased with Osiris forms the key-note of the entire "Book of the Dead," and that this doctrine cannot be supposed to have existed before c. 3566 B. C. The Book of the Dead cannot. therefore, have existed in any form before that date, which is considerably later than the date of the Great Pyramid. Now, it is evident that Mr. Bryant is not aware of the fact that certain parts of the Book of the Dead date as far back as the third and fourth dynasties: and it so happens that in the next item of this number of the Journal, some of the proofs of this fact, reported by Mr. Le Page Renouf, are referred to. Certainly one thing is clear, the Book of the Dead was not used as a ritual, but such a ritual is to be found in monuments later than the fifth dynasty.

CHAPTER LXIV OF THE BOOK OF THE DEAD.—M. le Page Renouf read at a meeting of the Society of Biblical Archæology, a translation of a very early chapter of the Book of the Dead—chap. LXIV. A rubric tells us, "This chapter was discovered at Hermopolis, upon a slab of alabaster inscribed in blue, at the time of King Menkara, by the royal prince Hartalaf, when he was journeying for the purpose of inspecting the temples, and he carried off the slab in the royal chariot when he saw what was on it." Menkara is a king of the fourth dynasty. The rubric of another copy tells: "This chapter was discovered in a plinth of the god of the Hennu-bark, by a master builder of the wall in the time of King Septa, the victorious." No other composition claims a remoter antiquity.

The rubrics show the work to be very remarkable. In the Turin papyrus it is headed, "Chapter of going out by day, sole chapter." Another papyrus heads it, "Knowledge of going out by day in a single chapter," indicating that this contains the complete knowledge required by the spirit at the day of resurrection. This is confirmed by the statements of later texts, and by a note at the conclusion, which

runs, "To be said on coming forth by day, that one may not be kept back on the path of the Tuat (or Hades), whether on entering or on coming forth; for taking all the forms which one desireth and the soul of the person die not a second time. If then, this chapter be known the person is made triumphant upon earth (and in the Netherworld), and he performeth all things which are done by the living." The value of such a record as this in our enquiries with the history of religious thought cannot but be great.

Mr. Renouf thus translates the first passages, and it may be taken as a sample of the whole: "I am yesterday, to-day and to-morrow, for I am born again and again; mine is the unseen force which createth the gods and giveth food to those in the Tuat at the West of heaven. I am the Eastern rudder, the Lord of two faces who seeth by his own light, the Lord of resurrection who cometh forth from the

dark and whose birth is from the house of death."

Mr. Renouf here remarks, "In reading this and almost every other chapter of The Book of the Dead, it is absolutely necessary to bear in mind that different divine names do not imply different personalities. A name expresses but one attribute of a person or thing, and one person having several attributes may have several names. It is not implied in this chapter that the Sun is the Nile or Inundation; but that the same invisible force which is manifested in the solar phenomena is that which produces the Inundation. But He has many other names and titles, e. g., One whose force is concealed or unseen. It is a theological term, frequent at all periods of the Egyptian religion, and implies that the Deity is not to be confounded with its external manifestation. The sun that we see hides as truly as it reveals the sun-god, who, as this chapter shows, has other manifestations."

The following sentence is remarkable: "Let thy paths be made pleasant for me; let thy ways be made wide for me to traverse the earth and the expanse of heaven. Shine upon me, O gracious power, as I draw night to the Divine words which my ears shall hear in Tuat; let no pollution of my mother be upon me; deliver me, protect me from him who closeth his eyes at twilight and bringeth to an end in

darkness."-Biblia, April, 1894.

MR. FLOYER'S WORK ON NORTH ETBAL.—Mr. Floyer has published a book entitled: Étude sur le Nord-Etbai entre le Nil et la Mer Rouge. In 1891 a scientific expedition under the command of Mr. Floyer was sent by the late Khedive to explore and survey the desert between the Red Sea and that part of the Nile which flows between Esneh and Assuan. The result is a report which takes the form of an elaborate work on the region that was surveyed. Mr. Floyer begins with the

geography of the district and an account of the course taken by the expedition. Then come chapters on the antiquities of the country, on the Phænicians whom Mr. Floyer believes to have once settled there, on its botany, mineralogy, and geology, on the ancient commerce of the Red Sea, on the astronomical determination of certain points in the valley of the Nile, and on the working of the Nubian gold-mines in the ninth century. The whole district is, indeed, full of the remains of the mines of gold and other metals worked by the Pharaohs, the Ptolemies, and their successors, as well as of the settlements in which the miners and their overseers lived. Mr. Floyer explored some of the ancient mines, and his description of them is not the least interesting part of his book. Mr. Floyer is a strong advocate of the effects of drifting sand in producing the present configuration of the desert, and he is inclined to regard the introduction of the camel into it by the Arabs as a leading cause of its existing treeless and waterless condition. The camel is the enemy of woods and forests, which are ruthlessly destroyed for its sake, and the disappearance of trees brought with it the disappearance of water also. In two or three places, however, Mr. Floyer still found basins of pure water. The book is enriched with excellent maps and photographs.—Acad., Oct. 7.

AN EGYPTIAN WILL OF 189 A. D.—Prof. Mommsen read a paper before the Berlin Academy of Sciences on an Egyptian will of the year 189 A. D., found in the Fayum and now in the Egyptian Museum of Berlin. It is a Greek translation of a Latin original. The testator is Caius Longinus Castor, Γάιος Λογγῖνος Κάστωρ, and the translator Caius Lucius Geminianus, whose office is Νομικὸς 'Ρωμαικὸς. The place where it is dated is Karanis, in the Arsinoite nome, and it was opened in Arsinoe. The date is November 17, 189. The will was opened Feb. 21, 194. The text is interesting for legal terminology, and Prof. Mommsen's examination and commentary are, of course, extremely thorough.—Sitzungsb. d. k. pr. Akad. d. Wissenschaften, Jan. 19, 1894.

EGYPTIAN PAPYRI IN GENEVA.—A collection of Egyptian papyri, recently purchased by subscription for the Geneva Public Library, is being examined by M. Jules Nicole. He has discovered fragments of the Iliad and the Odyssey, the former comprising portions of Books XI and XII, presenting great variations from the received text. There is also a passage of Euripides' "Orestes," a thousand years older than any MS. hitherto known. M. Nicole has likewise found a didactic elegy on the stars, an idyll on Jupiter and Leda, and historical and scientific compositions. In Christian literature there are liturgical passages, portions of the Bible with or without commentary, and later documents on Eastern Church History. There is also a letter

from a bishop or a superior of a monastery to the postal authorities, which asks for horses to be provided for three months for the use of the monks in travelling, "for they are Orthodox."—Acad., Oct. 14.

GIFT TO THE UNITED STATES .- Last year the Khedive presented to several European nations selections of the objects found at Thebes the year before, in the great collection of sarcophagi of the High Priests of Ammon. Lately the Khedive has presented a collection of socalled "duplicates" belonging to this collection, to the United States, through the American Diplomatic Agent and Consul-General. Five cases filled with antiquities have been dispatched to the Smithsonian Institution at Washington. The features of this gift collection are six or seven elaborately inscribed sarcophagi of wood, and a box three feet square by seven feet in length, which contained the mummy of the "great lady of Ashron, the musician with the hand for Maut," and the great singer of the retinue of Ammon Râ, king of the gods. The head of this coffin bears a representation of a solar disk in the arms of the goddess of heaven. A smaller or inner coffin portrays the deceased in the presence of Osiris, and shows a figure of a goddess with a double head, one a ram and the other a crocodile, and the great singer drinking of the water of life poured from a resplendent vessel by a goddess. A representation of the pillars of heaven rounds out the tableau. There is also the sarcophagus of another singer, Ammon Ra. The coffin of Amenhotep is interesting because he was not only a priest, but a famous scribe. Least important of the other burial cases is that of Paamen. Fully a hundred sepulchral articles of ornament or worship complete this gift.—The Collector, New York, Nov. 1.

MISS EDWARDS' COLLECTIONS.—Prof. Flinders Petrie has for some time past been engaged in classifying and arranging his own and the late Miss Edwards' collections of Egyptian artistic objects at the University College, Gower street. The authorities have assigned to Prof. Petrie a long gallery at the top of the south wing of the building, which is excellently adapted for exhibition purposes. The roof being low, the cases are all well lighted, and the general effect of the gallery avoids the sensation of funeral vaults experienced in so many museums. A copious and well-selected collection of works on Egyptology will be placed in the gallery itself for consultation by students. This is an arrangement that should prevail in all museums, and it is to be hoped that Prof. Petrie's example may be followed elsewhere.—Athen., Oct. 7.

GEOGRAPHIE ANCIENNE DE LA BASSE-EGYPTE.—Par le Vie. Jacques de Rougé.—This is a valuable account of what is known up to the

present moment of the ancient geography of Lower Egypt. It has all the lucidity and orderly arrangement that we are accustomed to meet with in French scientific works. The author, a son of the famous French Egyptologue, has made full use of the discoveries of Prof. Flinders Petrie and the Egypt Exploration Fund, and he has published for the first time the geographical names of the Delta given in a Coptic ecclesiastical MS. now preserved in Oxford. Where his materials are wanting he maintains a prudent silence; Avaris, for instance, the Hyksos capital, is not even mentioned in his pages. The book is indispensable to all who are interested in ancient Egyptian geography, and we hope that the author will follow it up with a similar work on the geography of Upper Egypt.—Acad., Oct. 7.

GRAFFITI OF HAT-NUB. - About thirty copies of the Graffiti of Hat-Nub, printed last year by Mr. Fraser for private distribution, have now been placed for sale in the hands of Messrs. Luzac of Great Russell street. These graffiti, discovered in 1891, were very carefully copied by Messrs. Blackden and Fraser. They are of great historical and palaeographical importance, ranging from the VIth to the XIIth Dynasty. Those of the Middle Kingdom are lengthy, and furnish curious information about the administration of the nomes and the state of the country in the time of the XIth Dynasty. They are generally dated in the reigns of the nomarchs, and it is equally remarkable that an oath is sworn "by the life" of the nomarch Nehera instead of the king. By the aid of these graffiti Mr. Newberry has been enabled to reconstruct the genealogy and succession of most of the nomarchs whose tombs are at El Bersheh, as will be seen in the next Memoir of the Archeological Survey, conducted under the auspices of the Egypt Exploration Fund.—Academy, March 3.

PROF. SAYCE'S LETTERS.—We select the following from Prof. Sayce's letters on his annual Egyptian trip:

ABU-SIMBEL, Jan. 20, 1894.

I hurried up the Nile this winter rapidly so that the only noteworthy event of my voyage from Cairo to Assuan was the discovery of early quotations from the Gospels in an ancient rock-church about a mile and a half to the north of the ruins of Antinoopolis. The church is in the quarries above a ruined Coptic monastery, and the quotations are from the beginnings of the Gospels of Matthew, Luke and John. The forms of the letters are of the fourth or fifth century.

While at Assuan, I visited a colossal Osiride figure in the granite quarries about a mile and a half to the north of Shellal, which was discovered by Major Cunningham, and last year was cleared of sand by M. de Morgan. It lies on its back, at a little distance south of a

stele, in which Amenophis III describes the execution of a "great image" of himself In the neighborhood both of the stele and of the colossus are huge unfinished sarcophagi, of which I counted eight, of the same size and form as the sarcophagi of the sacred bulls at Sakkarah. Their unfinished state shows that the death of Amenophis III interrupted the work of completing them; and we may, therefore, infer that during the reign of his successor, the "heretic-king" Khun-Aten, no more Apis-bulls were embalmed.

At Kalabsheh we spent two days, and discovered three Greek poems. The longest of these, in thirty-four lines, is specially interesting, as it mentions an otherwise unknown deity, called Breith (or, as Prof. Mahaffy would read the name, Sebreith), whom it identifies with Mandoulis, the native god of Kalabsheh. The lines in which the name occurs are the following:

ώς ήμαρ καὶ νύξ σε σέβει: ὧραι δ' ἄμα πᾶσαι καὶ καλέουσί σε Βρειθ καὶ Μάνδουλιν συνομαίμους, ἄστρα θεῶν ἔν σήμα κατ' οὐρανὸν ἀντέλλοντα.

The two gods are apparently identified with the constellation of Kastor and Pollux, and it would seem that an oracle of Mandoulis (Maruli in the hieroglyphs) was established in the temple.

I made a list of all the Greek inscriptions at present visible on the walls of the temple of Meroe; they amount in all to ninety-six.

At Dendûr I collated the published hieroglyphic texts with the originals, and found that the god whose name has been read Ar-hemsnefer should really be Ar-hon-snofer; and at Gerf Hossên I discovered some hieroglyphic graffiti on a boulder of rock at a little distance south of the temple. At Dakkeh and Kûbban we spent some time, and I busied myself in copying the texts in the portion of the Temple of Dakkeh erected by the Ethiopian king, Arq-Amon. Mr. Somers Clarke's examination of the structure proved that it had been finished before the buildings of Ptolemy Euergetes II were added to it; he fixes the date of Arq-Amon, and shows that he may easily have been the Eugamenes of Diodoros (iii. 6), who was a later contemporary of Ptolemy Philadelphos. As Arq-Amon is represented in one place offering homage to the deified "Pharaoh" of Senem or Bijeh, it is clear that the supremacy of the Ptolemy was still recognized by the Ethiopian prince as far south at all events as the First Cataract. In the latter part of the reign of Ptolemy Philopator, however, the Ethiopian kings not only made themselves independent, but even claimed dominion over Upper Egypt, and at Debot Azkhal-Amon, a successor of Arq-Amon, appears as an independent monarch. The temple built by Askhal-Amon at Debot is a close imitation of that of Arq-Amon at Dakkeh; and, as at Dakkeh, it was added to by Euergetes II.

Mehendi, Feb. 5, 1894.

After leaving Abu-Simbel, we spent a day in the temple of Hormhib or Armais at Gebel Addeh; and on the cliff a little to the south of it I discovered a graffito, which referred to the temple as being in "the country of Bak." In Bak I would see the classical Aboccis, rather than in Abshek, with which it is usually identified. The inscriptions I have copied, moreover, go to show that Amon-heri, and not Abshek, was the name of the city built by Ramses II at Abu-Simbel.

Faras, south of Mashakit, but on the opposite bank, stands on the site of a Roman town. The remains of a Coptic church still exist there; and in the walls of its old Saracenic fortress I found stones sculptured with hieroglyphs, as well as portions of the uraeus-frieze of an Egyptian temple. At some distance from the river are three tombs of an early period excavated in a low sandstone hill; the central one has been turned into a Coptic church, and the walls are covered with early Coptic inscriptions. Prof. Mahaffy and myself spent a couple of days in copying them. One of them is dated "the 8th day of Khoiak, the 10th (year) of the Indiction of Diocletian." Most of them are written in red paint, and have the form of pagan proskynėmata.

After leaving Faras we visited the ruined temple of Serra, which Capt. Lyons has been excavating. I copied all the inscriptions that are visible, including the cartouches of the Cushite countries conquered by Ramses' II, by whom the temple was built. On the north side of the entrance is a row of cartouches of the Asiatic countries he claims to have subdued. One of the texts states that the place was called User-Mâ-Ra-Ser-Shefi.

In the temple of Thothmes III at Wadi Helfa we found several Karian graffiti and a few Greek ones. The Greek texts, however, belong to the Ptolemaic age, with the exception of one half-obliterated inscription which I discovered the day before our departure from Wadi Helfa, and which is proved, by the forms of the letters, to go back to the age of the famous inscriptions of Abu-Simbel. One of the Karian graffiti is of considerable length, and the number of them suggests that at one time a body of Karian mercenaries was encamped on the spot. The walls and columns of the forecourt of the temple also contain numerous proskynėmata of a much earlier epoch. One of them is dated in the sixth year of Si-Ptah, the last king of the XVIIIth Dynasty; in another, dated in the third year of the same king, the writer, Hora, calls himself "the son of the deceased Kam," of the

harem of the palace of Seti II."; while the author of a third is described as an ambassador of Si-Ptah to Khal or Northern Syria and Cush.

While we were at Wadi Helfa we made an excursion to the great Egyptian fortress of Matuga q. v., about three miles to the south of Abusir. On an island, a little to the south, are the ruins of a Coptic church called Darbê. On the north side of the fortress is the site of an old city; and below it, close to the river, are brick tombs, which do not seem to have been disturbed.

After leaving Wadi Helfa on our downward voyage, we first visited three ruined Coptic churches on the western bank, without, however, finding anything to reward us. Then we explored a ruined town opposite Serra. Here we found five rock-tombs on the south, the remains of an ancient quay, walls of fortification of the Roman age, and three Coptic churches—one in the town and two outside it, one of the latter being to the south and the other to the north of the walls. Close to the last are quarries of the Egyptian period.

Opposite Faras is another Coptic ruin, which again yielded nothing to our archæological curiosity; but we were more fortunate at Ermennah (on the eastern bank), where I had noticed a tomb in the rock when we came up the river. On the rocks behind the village I found the name of Hor-m-hib. The tomb turned out to be of the same character as those of Wadi Helfa; but just below it were two niches for figures cut in the rock, with steps leading to them. At a little distance to the north of this, and at an angle of the cliff, I discovered a large and well-preserved stele, dedicated to Horus of Ma-nefer by a "governor of Nubia," who lived in the time of the XIXth Dynasty.

On the western bank, opposite Ermennah, is the site of what must have been a very large town. While wandering over it, I picked up a fine diorite axe. Capt. Lyons has found a similar one at Matuga.

We spent a day and a half at Quasr Ibrîm. Above the text of Seti II. the Pharaoh is represented in the act of slaying an enemy, while his empty chariot is being borne away from him by a couple of horses. On the right hand side of the inscription Amen-m-apt, "the royal son of Kush," offers a song of praise to his victorious lord.

Close to the stele Prof. Mahaffy found a Karian graffito, and there are a good many Coptic inscriptions scratched on the rocks. The summit of the hill to the east of the fortress is covered with brick tombs, and the remains of an old town lie on the northern slope of the mountain on which it stands. At the northwestern corner of the mountain I found a somewhat enigmatical inscription in Greek letters.

After Qasr Ibrim our next visit was to the interesting speos of Thothmes III, in the district of Dûgenosra, to the south of the village Ellesîyeh. Lepsius has published the inscriptions belonging to it. There is a tomb near it, with the cow of Hathor sculptured on either side of the entrance. The old Roman fortress I have described in my last letter lies on the opposite side of the Nile, a little to the north of the Ellesîyeh; we visited it again on our way down, and found that a town of considerable size had once existed to the south of it. We picked up Roman pottery and blue porcelain on its site.

Next we passed a morning at DIRR. To the south of the speed of Ramses II, I came across a large tomb, without inscriptions, however, and to the north of the speos a series of monuments, the first of which—a stele of Amen-m-hib—is already known. North of this there are a good many hieroglyphic and hieratic graffiti on the cliffs, as well as two curious monuments which deserve a special description. One of these is a stele, the centre of which is occupied by two sitting animals, which look like pug-dogs set face to face: on either side is a hieroglyphic inscription, from which we learn that the author's name was Anup-a. The other monument is the most northerly of those we met with. On a rock is a long and well-preserved hieratic text, which records the name and titles of a certain "superintendent of the treasury." Immediately in front of this is a niche, in which an image once stood. The niche is now filled with bowls and offerings of wheat or durra, which I was told were given to "the Sheikh Isû," who expected that I also should not quit the spot without a suitable "bakshîsh." It is evident, therefore, that when paganism was superseded by Christianity the old pagan image became an image of Christ, and that upon the triumph of Islam, though the image was destroyed, the ancient cult still continued to survive. It is an instructive instance of the continuity of religious practices, if not beliefs, in the valley of the Nile.

This afternoon we explored the ruins of the fortified Coptic city of Mehendi. In the centre of it is a Coptic church, which Lepsius (in his *Briefe*) has mistaken for the residence of a Roman governor. The foundations of the southern gate are of Roman construction, but some of the stones have been taken from an Egyptian temple, which the sculptures upon them show to have been of a good period. Possibly they belonged to the old temple of Thoth at Penebs, the Hiera Sykaminos of the Greeks, since the temple of Maharraqa, which now exists on the site, is of late Roman workmanship. Maharraqa is only two miles to the north of Mehendi. On the rocky cliff at the south-eastern corner of the latter place I found some drawings, of Christian origin

but spirited design. Among them are the dove with an olive branch in its mouth, the Good Shepherd, and a large *crux ansata*, the ancient Egyptian symbol of life, employed in place of a cross.—A. H. SAYCE, in *Academy*, Feb. 24.

ABUSIR.—DISCOVERY OF MASTABA OF PTAH-SHEPSES.—In Lepsius' plan of the ruins of Abusir, the mound nearest to the pyramid of Sahu-ra, King of the fifth dynasty, is marked as *Pyramid No. XIX*. But M. de Morgan, during his recent excavations at Sakkarah, decided that, owing to its rectangular form and its central depression, it could not be the remains of a pyramid. An attempt to solve the problem led at once to the discovery of some square piers, which proved this monument to be an immense mastaba. It was found to be the tomb of one Ptah-Shepsés, who lived under King Sahu-ra of the fifth dynasty. The importance of this discovery is so unusual that a full description will be given, taken from M. de Morgan's paper in the *Revue Archéologique* for Jan.–Feb., 1894.

The mastaba of Ptah-Shepsês (fig. 2) measures 45 m. in length by about 25 m. in width, and is composed of seven halls, one of which is a large court, 24 m. long by 19 m. wide, encircled by a colonnade of twenty heavy square piers. This court is rude in style, while all the other chambers, A, B, C, D, E, F, far smaller in size, are highly decorated. The court not having been fully excavated, it is not known whether it was entirely covered, or only the space between the line of piers and the E. W. and S. walls. There may have been other piers in the centre: otherwise the span of 11 m. is too great for the stone architraves which alone were used in monuments of the Early Empire. Like all works of this period, this tomb was constructed of two kinds of stone. The mass of masonry was of a local, greenish-gray, friable calcareous stone: the facings and all the more careful masonry was of Tourah stone, a white calcareous formation, compact and unstratified, which took a good polish, was not hard to carve, and was far more resistant. In fig. 1 the single lines represent the Tourah stone, the crossed lines the local stone, the dotted lines where there remain but traces of the construction.

Two doors led into the great court. One (P₁) on the south side led into a street running E-W, which probably served for a large number of tombs; the other (P₁) ended in a cul-de-sac. Both are well-nigh destroyed. On each of the columns of the south door was a representation of the defunct and his titles. He was a very high functionary, "chief of all the works of the King," i. e., Minister of Public Works. The architraves that still lie near the columns bear the complete titles of the defunct.

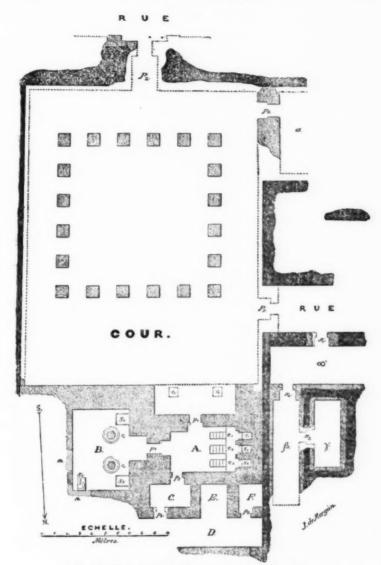


FIG. 2.—PLAN OF THE MASTABA OF PTAH-SHEPSÊS.

Passing southward across the court we came to a portico, 6.60 m. wide by 2.40 m. deep, pierced in the wall, now almost destroyed. This portico was placed before the entrance to the tomb chambers. The wall of the court east of the portico¹ bears bas-reliefs for a width of 1.57 m. The rest of the wall as far as the N. W. corner has inscriptions and representations. Within the portico, to the right of the door, is the image of Ptah-Shepsês, carried by his servants on a primitive palanquin. To the left of the door are interesting scenes of the transportation of colossal statues of the defunct to his tomb. They are placed on a wooden sled, whose front end is raised; sixteen men, two by two, pull the cable, while one man leaning in front of the sled pours water (Pl. 1, Rev. Arch.). Such representations are familiar in later monuments. This has a special interest from its early date, and the fact that important fragments of the colossal statues here represented have been found.

Passing through door p1, which was single, we enter hall A, 5.15 m. long by 3.60 m. wide. This hall contains at its W. end a triple naos, preceded by a stage and three small staircases (e_1, e_2, e_3) , placed opposite niches. They were formerly occupied by statues (s_1, s_2, s_3) of which no trace has been found, and were closed by a double door, whose hinges still remain. The walls of hall A are completely covered with reliefs representing the details of private life: such as the care of domestic animals, oxen, goats, gazelles, antelopes, poultry (ducks, geese, pigeons); agricultural scenes, artisans at work; cabinet work, sculpture, engraving, pottery, metal founding, etc. Then come rows of servants, the produce of the defunct's property—grains, fruits, cattle.

A double door cut in a brick wall (3.30 m.) covered with bas-reliefs representing Ptah-Shepsês and his servants, leads from hall A to hall B. This hall, larger than the preceding (4.40 m. long, 6.35 m. wide), is not in so good preservation, but it has a capital interest for the history of Egyptian architecture. The ceiling was originally sustained by two lotiform columns, placed, curiously enough, not along the axis of the hall, but far nearer the door. In these lotiform columns the capitals are formed of a bunch of six lotus flowers half-opened, between each of which is a much smaller lotus. These are all bound together at their base by five bands, which form the annuli. To each of the lotus flowers corresponds a heavy stem; immediately under the annuli are the small short stems of the intermediate flowers, filling in the space between the main stems. The shaft has a maximum diameter of .64 m. The section of its six lobes is not circular, but

M. de Morgan uses the term "peristyle" incorrectly in describing this portico.

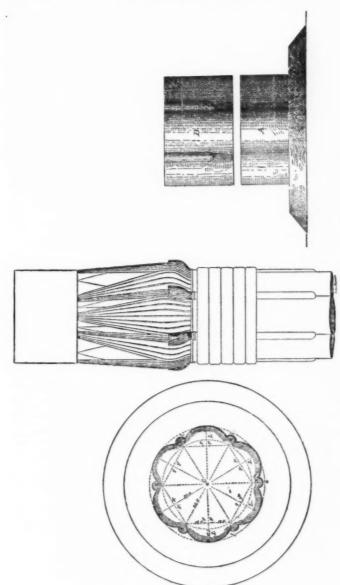


FIG. 3.—LOTIFORM COLUMN IN MASTABA OF PTAH-SHEPSÉS.

elliptical. The material is Tourah stone, which was originally brilliantly painted; the shaft a sky blue; the pedestal brown; the secondary stems alternately yellow and brown; the five annuli, green, red, blue, red and green; the base of the flowers blue, rising from yellow line. Between the large petals, painted blue with yellow lines, are other smaller petals of light green, while the ground of the flower was red. In the small flowers the large petals and the base are green, the base line yellow and the secondary petals red and brown.

Representations of aedicula, decorated with lotiform columns, are found in tombs of the vi dynasty (mastaba of Ti and of Mera), but no architectural example of the time of the Ancient Empire had hitherto been found. M. de Morgan says that the invention of this form had been ascribed to the New Empire, but a considerable number of such columns have been found in tombs of the xi, xii and xiii dynasties. But in any case the lotiform columns of the mastaba of Ptah-Shepsês are far the earliest known and of great historic interest.

Hall B originally contained three statues. From the few remaining fragments, they would appear to have been standing statues, like those reproduced in the reliefs. The walls are covered with painted reliefs (Pl. II, Rev. Arch.). On the S. wall is a fleet of row-boats with raised poop and prow, where the boatswain stands in a central cabin giving his orders, and two men ply long oars at the stern. Donkeys, goats and cows are attached on deck. At the entrance to the cabin is Ptah-Shepsês; his wife is further aft. The scenes are extremely realistic and full of minute details.

The door p, from hall A, leads into the secondary chambers C, D, E, F, which are of slight interest, owing to their ruined conditions. Apparently other secondary rooms, now destroyed, existed to the north.

West of the principal mastaba, opening into the *cul-de-sac*, is another tomb, also with the name of Ptah-Shepsês, perhaps a son. It is almost entirely destroyed, and its halls, α , β and γ , are without reliefs.

One further consequence of this discovery is to prove beyond a doubt that the pyramid adjoining this tomb is really that of Sahu-râ, as had been already conjectured.

ALEXANDRIA.—THE MUSEUM AND PLEA FOR EXCAVATIONS.—Though open barely a year, the museum is already well filled. Objects have been sent to it from Gizeh, and numerous presents—many of them of great value—have been made to it by the inhabitants of Alexandria. The curator, Dr. Botti, has already arranged the collection, labelled the objects contained in it, and published a Catalogue under the title of "Notice des Monuments exposés au Musée Greco-Romain d'Alexan-

drie." This Catalogue is divided into two parts, the first containing a general description of the objects exhibited, while the second is a catalogue raisonné, intended for scholars. The inscriptions published and annotated in the second part give the book the character and value of an independent archæological work. So also does the exhaustive list of the marks on the handles of Greek amphoræ discovered at Alexandria, of which there is a very large number in the museum. The list shows that most of the pottery used at Alexandria was imported from Rhodes, though there are a few specimens from Knidos, as well as some examples of native Alexandrine manufacture.

One of the most interesting portions of the collection is a series of sepulchral vases discovered in 1886, near the ancient Kanopic Gate, many of which found their way to New York. The vases are inscribed with *graffiti*, partly in capitals, partly in cursive, from which we learn that they contained the ashes of various Greek mercenaries in the service of Ptolemy IV. and his successors. Among them we find Cretans, Thracians, Acarnanians, and Arcadians. [Described in this

JOURNAL, Vol. I, by Prof. A. C. Merriam.]

I may also mention a fragmentary Greek inscription found at Menshiyeh, the ancient Ptolemais, in which reference is made to a "curator of Greek libraries" (ἐπίτροπος βυ [sic] βλιοθήκων ἐλληνικῶν) in the reign of Hadrian, as well as certain statues from the Birket el Qarûn in the Fayyûm, which exhibit a curious combination of Greek art with the native art of the so-called Saitic school. One of them is dedicated to "the great God Soknopaios," explained by Dr. Krebs as the representative of the Egyptian Sobk-nob-aa, "Sebek lord of the island"; while another, which is dated in the month Tybi of the fourth year, was offered on behalf of Ergeus." Dr. Botti suggests that this Ergeus, of whom we have no other record, may have been a local ruler of the Fayyûm in the later Greek or earlier Roman period.

A study of the Catalogue brings one fact very clearly to light. The number of inscribed monuments found within the walls of Alexandria itself, and consequently of service in settling the ancient topography of the city, is very small indeed. That such monuments exist underground is indubitable, and excavation alone is needed to discover them. Some of the leading citizens have already started a fund for the purpose; the amount raised in this way, however, is wholly inadequate for clearing away the masses of débris which cover the remains of the ancient Alexandria. Unfortunately, the work must be undertaken now or never: the modern city is rapidly advancing eastward, and the district in which the principal buildings of ancient Alexandria once stood will soon be covered with streets of houses underneath

which it will be impossible to dig. The importance of such excavations may be gathered from the fact that we do not at present know the precise situation of the ancient Museum; even the site of the Tomb of Alexander is uncertain. If once the sites were ascertained, there would be a chance of discovering the relics of the libraries—at all events of that of the Museum—which were the chief glory of the Alexandria of the past. Could not the Egypt Exploration Fund find some way in which to unite its forces with those of the Archæological Society of Alexandria?—A. H. SAYCE, in Academy, Dec. 2.

CAIRO.—GHIZEH MUSEUM. — The latest important acquisition of the Ghizeh Museum is, from an artistic point of view, one of the most valuable objects yet discovered in the Nile Valley. It consists of an ebony door, and part of another, found by M. Naville at Dayr-el-Bahari. On one side are represented, in low relief, bands of Tats and symbolical knots, and beneath a dado of simple geometrical pattern. The reverse contains two registers of sculpture, in low relief, of Thothmes II. worshipping Ammon Ra, with a dado below. Remarkable historical interest pertains to these bas-reliefs, as the figure of Ammon Ra is erased throughout, and, from the reckless hacking, by the hands of a most violent iconoclast. The first, and probably correct, explanation of the mutilation which arises in the mind is that it was perpetrated by Khuenaten when he endeavored to suppress the worship of Ammon. The destruction could searcely have been the work of early Arab invaders, since they would not have allowed the figure of the king to remain, and it is improbable that the first Christians would have wreaked their vengeance on the god alone, leaving pagan symbols to remain. Besides the above subjects there are bands of hieroglyphic inscriptions, bearing the cartouche of Thothmes II.

Regarded from a technical point of view, the execution is a marvel of wood-carving, and the exquisite rendering of the low relief is a triumph that perhaps only a sculptor can adequately appreciate. One naturally recalls the more celebrated examples of doors on which the skill of the artist has been lavished: in metal, the Assyrian gates in the British Museum, the doors of Monreale, of Amalfi, and other Byzantine work; in wood, the work of the Italian Renaissance, like the doors in the Palace at Urbino; and we think that for noble purity of style the general voice would award the palm to this eighteenth dynasty Egyptian wood-carving. The question arises, were the doors (they were folding) originally seen as ebony, or were they plated with metal, gold or silver? A careful examination of the surface shows it to be covered with plugged holes, that attach the panels to cross-bars

inside the framework, also ebony. But these, or some of them, might have been used to attach the metal to the surface. Again, one may be allowed to doubt whether the tops of the pegs would have been allowed to appear if the wood was to remain bare. Another weighty reason in favor of silver or gold will be found in the scheme of coloration of the temple of Deyr-el-Bahari, which still remains visible in parts. It is exceedingly bright and light in key, and the black ebony, although splendid in itself, and when seen in the chamber of a museum, would scarcely have harmonized with the general polychromatic effect. Dr. Brugsch supposes the doors belonged to a tabernacle of the temple; the height of one is about six feet by four feet, the other is only represented by a panel.—Athenæum, March 10, 1894.

KOPTOS.—PROF. FLINDERS PETRIE'S WORK.—Koptos as a city no longer exists; the present village of Koft is a small collection of mud-brick hovels lying immediately behind the raised bank of the Nile. Behind the village of Koft a raised causeway at right angles to the river leads, at a distance of half a mile, to the ruins of Koptos, such of them as remain, for the ancient city was probably larger than the area contained within the present Roman walls, twenty feet thick, of unbaked brick. The plan of operations is by trenches to discover the walls of the building, in the present case a temple, then to open a trench along the whole length of the wall down to the original pavement, and then below to former pavements. If statues, stelæ, or other objects are found they are hoisted out and the trench filled up with the earth of a parallel one dug in advance. Thus the whole surface is explored and covered over again to prevent the destruction of what is not removed. Prof. Petrie began operations on the 9th of December last, and soon discovered the site of the temple on the southeastern portion of the enclosure. The temple and pylons appear to cover a large space of ground, and stand within a temenos of corresponding proportions. Among the statues already unearthed are a colossal red granite triad of Ramses II. between two goddesses, a black granite kneeling figure, and the legs of a colossal statue in white limestone. The last is probably very early work, and bears cut into the right thigh representations of animals, as an elephant, hyena, fishes, &c., similar to ancient rock carving. A red granite stele bears the date of the twentyninth year of Ramses III.; another is inscribed with the name of a daughter of Ramses VI. There are, also, a colossal head of Caracalla in red granite, Greek and Latin inscribed stones, a Latin dedication of a bridge, another bearing the name of the little-known Emperor Quietus, and a table of the tolls paid on goods and on individuals entering Koptos: among small objects a portion of a figure on an inlaid

tile similar to those found at Tel-el-Yahoudi, and now in the British Museum. A figure of a prisoner of the same style in the Ghizeh Museum was found, half at Koptos by M. Bouriant, and the other half purchased of a dealer.—Athenæum, Feb. 3. [A description of the extraordinary prehistoric and Early Empire antiquities afterwards found will appear in our next issue.]

DASHOUR (near Sakkarah).—M. de Morgan had been for some time planning excavations at the brick pyramid of Dashour, which had never yet been entered by excavators. The interest was all the greater in that the pyramid belongs to the time of Usertesen II, of the twelfth dynasty. A letter written by M. de Morgan, on March 1, announces his success in finding the entrance to the pyramid, and the wealth of

sepulchral chambers that lie beneath the pyramid.

"Arrivé a Dahchour depuis quinze jours environ, j'ai attaqué la fameuse pyramide de briques, qui jusqu'ici avait resisté à toutes les fouilles. J'ai du surveiller de très près ces travaux et bien m'en a pris, car hier, 28 février, je suis entré dans le sanctuaire des morts. Déjà quatorze chambres funéraires et quatorze sarcophages sont visibles, mais un éboulement coupe la galerie principale. Il faut que je le passe avant de voir les autres chambres qui probablement seront très-nombreuses. Le tombeau du roi n'est pas dans la partie explorée hier; il est plus loin, mais j'ai la certitude de le rencontrer puisque je suis dans la place. Comme vous le savez, les pyramides ordinaires renferment un seul sarcophage et au plus deux chambres, construites dans l'épaisseur du monument. La pyramide de briques au contraire est massive et ne renferme rien. Les tombeaux sont creusés dans le rocher au dessous, et c'est par un puit que j'y suis descendu, mais là n'est pas la seule différence. L'interieur est une véritable necropole renfermant les tombeaux de toute la famille royale. Ces tombeaux donnent tous sur une galerie dont la partie déjà découverte est dirigée d'est en ouest." Among the treasures in one of the royal chambers, is a pectoral in massive gold, 44 mm. high and 55 mm. long, and weighing 37½ grammes. In the centre of the pectoral is the cartouche of Usertesen II; on either side are hawks, wearing the crown of Upper and Lower Egypt, respectively. The signs of the cartouche are said to be composed of carnelian, lapis-lazuli, and turquoise, let into the gold. The reverse bears similar decoration, except that the ornamentation is incised.—Athenæum, March 24.

The gallery was found 27 ft. below the surface and was 230 ft. long. The sarcophagi are those of high functionaries and of a queen—all of the XII dynasty.

The Cairo correspondent of the *Times*, under date of March 11, says: "The excavations by M. de Morgan at the brick pyramid of Dashour

have yielded a large find of jewelry and gold ornaments bearing cartouches of Kings Usertesen II. and III. and Amenemhat III. Brugsch Bey, who is now arranging them in the Ghizeh Museum, considers that they far surpass in beauty and exquisite workmanship anything previously found in Egypt. The kings' tombs have not yet been found, and the broken condition of the sarcophagi indicates that the place had been rifled.—Athenæum and Academy, March 10. [A summary of the full description of these epoch-making discoveries in the

Gazette des Beaux Arts will appear in our next issue.]

DEYR EL-BAHARI. - Mr. Hogarth writes: The labors of the first season and of the three weeks which have elapsed since work was recommenced in the second have produced an astonishing change in the appearance of the temple. It is literally being cut out of the mountain. When the vast mounds upon the middle terrace have been cleared away—a labor which cannot proceed very fast—the brilliantlywhite colonnade round its northwestern end will become a landmark visible for miles. The clearance of this part of the temple will have a double interest: firstly, architectural, for Mariette's plan has been found to bear very little relation to fact, and the present appearance of the walls promises unusual features of construction; secondly, artistic, for we have found that a wall of unknown painted reliefs exists below the accumulated rubbish. These will be laid bare during the next fortnight; but the main mass of the mounds will hardly disappear this season. Already upon the upper terrace are piled more than 300 sculptured blocks, taken by the Copts from all parts of the Temple to build their convent walls. In the mounds of the middle terrace we shall recover nearly as many more, of which some show already. When all is cleared, and the possibilities of further discovery exhausted, these blocks will be sorted, and, if possible, built up again in their original places. This work, which will be supervised by Mr. J. Newberry, the architect attached to the expedition, will be of the first importance both on artistic and historical grounds; for it will result in the reconstruction of several scenes hardly inferior, either in interest or workmanship, to the famous Punt reliefs. For example, much has been recovered of the decoration of the third or lowest terrace, showing that there was represented another nautical scene—the transportation of two obelisks from Elephantine, at the bidding of the Queen. Either in the mounds, or by the demolition of the Coptic walls left standing on the upper terrace, it is hoped that the rest of this scene may be found. Every effort is being made to preserve all evidence as to the subsequent history of the temple, and to find the small objects of antiquity scattered among the débris. So far, the main

finds of the latter class have been beads, scarabs, and figurines, made of the famous blue-gazed ware. Good Demotic and Coptic ostraka are frequent, and there is much refuse from rifled mummy pits of the xxiid Dynasty. Some coffins and mummies have been found lying loose among the upper layers of débris: one fine case belonged to Namen-Menkhet-amen, a relative of Osorkhon ii and Takelothis; another contains a very finely rolled mummy, for whose reception it was not originally intended; a third is early Coptic, and shows on the front of the outer cloth representations of wine and corn in the hands, while below is the sacred boat of Osiris, and over the heart a swastika.

The uppermost layer of the mounds consists entirely of the débris of previous excavators. Below this lies a layer from three to six feet deep of Coptic rubbish, left by the monks of the convent. Here are found ostraka and large quantities of broken blue glaze ware. Immediately below, in the only place on the middle terrace where we have sounded to the bottom, we have found the original pavement. Only, therefore, if we come upon untouched mummy-pits below this pavement, can we hope for any considerable find of small antiquities; for, so far as we have yet seen, there is no débris older than Coptic.

While the upper stratum of the mounds is being cut away, progress can be made in the copying of the inscriptions, a large number of which, having been pretty thoroughly erased, present great difficulties. The reconstruction of the Great Altar is to be begun as soon as the masons now at work on the house which is being built for the excavators are free. When the whole site has been cleared, the very costly and difficult work of reconstruction must be begun. That of the western-most wall will present peculiar difficulties, but, from the point of view of artistic effect, will best repay labor and cost. If the stone-slide of the cliff can be banked up, and the present Coptic constructions demolished, a large number of sculptured blocks belonging to other parts of the temple will be recovered, and the niches restored to their former beauty. The immense task of cutting away the mounds on the middle terrace will take two seasons at least, and the more shallow accumulation on the lowest terrace will still remain. No excavation of the same magnitude is being conducted at present in Egypt; and it is satisfactory that, where so much labor and money must be expended, the monument to be laid bare should be of such exceptional interest. Architecturally, Hatasu's Temple has no parallel: in the quality and preservation of its painted reliefs, it vies with any of the best known tombs; it is placed in a grander situation than any other building in Egypt.—Academy, Feb. 17.

Close of the Excavations.—Mr. Hogarth writes from Luxor, on March 16, that the excavations were closed the day before. The large mounds on the central terrace were not entirely cleared away, but their height everywhere reduced by twenty feet, and, on the W. and N. sides of the terrace, cut away to the level of the pavement and rock. Some hundreds of demotic and Coptic ostraka were found, mostly letters and legal documents, although some appear to form part of a library catalogue.

Colonnade.—On the northern side of the terrace we have laid open in its entirety a fine colonnade, formerly buried under fallen mountain débris; . . it has fifteen sixteen-sided columns, each fourteen feet eight inches high to the top of the abaci. A sandstone architrave rests only on the eight westernmost, and it appears certain that the eastern part of the structure was never finished. A wall of brilliantly white limestone is built against the mountain behind, and four vaulted chapels, uninscribed and perhaps unfinished, open out of it. Between and inside the columns exist at present a number of mud-brick chambers, which, when excavated, yielded Ramesside pottery and fragments of hieratic papyri, besides scarabs, beads, amulets and bits of bronze. These chambers are . possibly dwellings of workmen of Rameses II, engaged on a restoration of the temple, and never destroyed because the completion of this colonnade was not carried through.

Hypostyle Hall.—We have cleared also the hypostyle hall at the western end, which was entered by Mariette, but left full of rubbish. It is one of the best-preserved remains of antiquity in Egypt. The star-spangled ceiling rests on twelve sixteen-sided columns over fifteen feet high: right and left are brightly painted funerary niches, and the main walls show scenes still brilliant in coloring, the Queen and Thothmes III offering to gods of the dead. A short staircase ascends at the back of the hall to the three-roomed chapel, on whose walls the Queen offers to Amen Ra and Anubis. As this hall is completely covered in, there is good hope that its paintings may be long preserved with their freshness little if at all impaired.

South of this hypostyle, and west of the main court of the central terrace, is a portice corresponding, in everything but excellence of workmanship, to the famous Punt portice on the south side of the central causeway. It is very much ruined; the square pillars are only complete at the broken end, and very few of the architrave blocks or roofing slates are in position. The number of these fallen masses of stone proved a great impediment to us, and we have been able this season only to clear the space between the western rank of

pillars and the wall. By so doing we have laid bare a very interesting series of representations concerning the preliminaries and circumstances of the birth of the Queen. Her mother, Ahmes, appears, conducted by several divinities to the presence of Amen, and the god appears to her in the guise of her husband, Thothmes I, as in those well-known scenes in the Luxor Temple, relating to the birth of Amenhotep III. Much restoration has been done on this wall by Rameses II; but the fine portraits of Ahmes herself have escaped his hand, and remain admirable examples of xvIII dynasty art, both in moulding and coloring. The inscriptions, though defaced, are fairly legible. Among the débris, which has lain since an early period on the court bounded by this portico, the hypostyle, and the colonnade, we have found most of our small objects of art in stone, ware or paste. Not much statuary has been discovered; the best piece is the lower half of a kneeling statue of Senmut, the architect of the temple; and a very fine portrait head in sycamore wood, on a part of a mummy case, is worthy of special mention. Amulets, figurines, rings and scarabs, inscribed and uninscribed, have been discovered in considerable numbers; and in addition to countless separate beads, some fine necklaces of blue ware, still strung, with pendants attached, were found in the lowest layer of deposit. Papyrus has been unearthed only in innumerable small fragments; the largest pieces have formed part of copies of the Book of the Dead.

The Temple at Devr el Bahari, as has been often remarked, is not built on a general plan, comparable to that of any other Egyptian temple. Several parts of it, however, taken by themselves, recall the conventional arrangement of peristyle court, hypostyle and sanctuary. In fact, Devr el-Bahari may be regarded as an aggregate of small temple-units. So on the central terrace we have the northern colonnade, answering to the usual peristyle, which leads to a hypostyle, out of which opens a sanctuary. As Thothmes I and II do not appear in any part of it, but only Hatasu and Thothmes III associated, we may assume that it was built after the death of Thothmes II and before the Queen-regent's rupture with her nephew, and was intended to be more particularly the funerary shrine of Hatasu herself and Thothmes III. It is apparent, however, that the original construction has been altered in this region, and we must wait until the whole terrace has been excavated before we can draw conclusions as to the architectural history of this part of the temple.

The reconstruction of the high altar of Harmachis on the upper terrace has been carried out successfully by Mr. John E. Newberry, nearly all the missing parts of the inscription having been found

among the débris close at hand. The funerary chapel of Thothmes I has been restored; and in digging out the space between the broken north wall of the altar chamber and the rock face we have found all the missing blocks belonging to a brilliantly-painted niche in the vestibule, and from them reconstructed it. Here (for once) Queen Hatasu appears in her male guise, unerased. The broken northern and western main walls have been built up again in part, to be completed if possible next season; and the crumbling cliff above has been shored up strongly with rough masonry. The northern end of the terrace is therefore nearly finished, and the main work of next season must be the reconstruction of the niches in the west wall of the main hall of the upper terrace. The major part of the existing wall about them is of Coptic construction, and must be pulled down, in order that numerous sculptures belonging to other walls in the temple may be recovered; but in order that this may be done and the safety of the niches assured, the sliding cliff on the west must be shored up not less strongly than on the north, at great expense of money, time, and labor.

The artists have completed their plates of the Altar Chamber, the Hall of Offerings, and the Chapel of Thothmes I; and these, together with drawings of the altar and the doors of the ebony shrine discovered last season, will constitute the first fascicule of the complete publication of Deyr el-Bahari, proposed by the committee of the Fund. It is hoped also that, when the excavation is complete, it will be possible to deduce results bearing generally on Egyptian art. The quantity of relief-work of admirable quality, the variety and freshness of coloring, and the comprehensive find of objects in blue ware ought to afford material for valuable chapters on plastic, pictorial, and ceramic art in the period of the XVIII dynasty.—D. G. Hogarth in Academy, April 7.

EL-KAB.—With the permission of the Society of Antiquaries, it was proposed to hold in October a small exhibition at Burlington House of the photographs, photographic enlargements and drawings made by Mr. J. J. Tylor and Mr. Somers Clarke during the last winter season at El-Kab (Eileithyia) in Upper Egypt. In addition to the vast brick walls which still remain, there is a large number of rock-cut tombs, several of which are of great historic interest and of a good period. One of these, the tomb of Pacheri, has been selected especially for illustration. The photographs are all taken to scale and are enlarged to one-third of full size, i. e., four inches to the foot, thus giving a more complete transcript of the delicate reliefs than has before been attempted. Lying a little way in the desert and behind El-Kab is the

small temple of Amenhotep III. Of this very perfect little building careful measured drawings have been made, supplemented by photographs—to scale—of the internal decorations.—*Athenæum*, Sept. 16.

KARNAK.—Arrest of the decay of the temple.—One of the objects for which the Society for the Preservation of the Monuments of Ancient Egypt is striving, is the arrest of the gradual decay of the temple of Karnak by means of Grand Bey's scheme for carrying off the inundation water of the Nile. Major R. H. Brown, of the Irrigation Department, undertook to act in the interests of the society and sent a detailed report in July, made after a careful survey. His object is to prevent the periodical wetting and drying of the bases of the walls and columns, which have been the cause of the gradual undermining which has gone on for centuries and has brought down many of the columns. If, as is to be believed, Major Brown's scheme is successful (and he seems confident that all will be ready for work during the inundation of 1894), the second main object for which the society was originally started will have been achieved, and the most magnificent group of ruins in the world, which M. Maspero is said to have stated could only be abandoned to their fate, will be saved from further decay. Major Brown's estimate of the cost was about £500 for the engine and £200 a year for keeping the engine at work. But a further sum of £600 would be required for making a permanent building for the engine and for an iron duct and masonry. Major Brown's report and estimate were adopted by the committee last August, and he is now making arrangements with M. de Morgan.-London Times, Feb. 24.

MATUGA (NEAR ABUSIR).—FORTRESS OF BA.—About three miles south of Abusir, Capt. Lyons has discovered a great fortress, defended on three sides by two walls of enormous thickness, the natural cliff serving for its protection on the eastern side. In the southwestern part of the enclosure Capt. Lyons has excavated a little temple or chapel. The inscriptions he found in it show that the place was named Ba, and that the fortress had been built by Usertesen III. On a large island opposite to it, in the middle of the Cataract, are the remains of another similar fortress.—Prof. Sayce's letter in the Academy, Feb. 24-

PHILAE.—THREATENED DESTRUCTION OF THE TEMPLE.—Various plans have been lately proposed in solution of the problem, so very important for Egyptian prosperity, of the best way to store and utilize the surplus waters of the Nile. In view of one highly recommended plan we reprint the following letter:

Strathearn House, Crieff, N. B., Jan. 31, 1894.

I notice that the projects for the construction of reservoirs in the Nile have been completed, and that the Under Secretary for Public Works in Egypt admits that the Aswân Shallâl or Cataract site is the best and most economical of those proposed. He recognizes the objection caused by the unavoidable inundation of the temple at Philae, but suggests that the temple might be removed and built on the adjacent island.

I would earnestly call the attention of the archæological world to this "unavoidable" act of vandalism. It is not enough to say that a committee of three engineers from England, France and Italy has been appointed to study the question: they were not sent in the interests of art, but to study the stability of the great dam. I do not wish for a moment to suggest that these three eminent hydraulic engineers are themselves vandals. Yet it is well known that engineers, when swayed by the interests of their calling, do not take into consideration the art side of the question; and it is not to them that we would naturally turn when we wish to preserve a world-famous monument, but to men of taste and archæological knowledge. I hope that a protest will be lodged in the proper quarter against this act, which will cast a slur on the English in Egypt.

Though the expense would no doubt be greater, I am still of opinion that water held back up to the plinth of the temple of Philae, supplemented by another dam higher up the river, would accomplish what is wanted in the way of supply. Two dams will be much safer than one, and the celebrated temple will be spared. Justin C. Ross (late Inspector-General of Irrigation, Egypt).—Academy, Feb. 3, 1894.

The above statement places the question fairly before the public. Considerable sentiment and indignation have been excited in England by this project of a dam at Philae, involving the destruction of

the temple.

On Feb. 22 the Executive Committee of the Society for the Preservation of the Monuments of Ancient Egypt passed a resolution which appeals to the Secretary of State for Foreign Affairs against the submersion of Philae, and against the plan to take down the temples and rebuild them on another island. A similar resolution was passed at the same time by the Society of Antiquaries. On Feb. 14 the Foreign Office informed the Society that a special technical committee, composed of an English, a French and an Italian engineer, had been appointed by the Egyptian Government to consider the various projects which have been submitted for storing the surplus waters of the Nile.

Mr. Reginald Stuart Poole, Secretary of the Egypt Exploration Fund, writes a calm letter, in which he reviews the questions to be considered by the technical commission: 1. A dam on the Assuan cataract; 2. A dam at Kalabsha; 3. A dam at Silsilis; 4. The Wadi

Rayan project. The first three projects involve works with sluices across the Nile, and the last the utilization of a depression in the desert near the Fayum, avoiding all works across the river.

We refer to Mr. Cecil Torr's letter, in the *Times* of Feb. 27, for a good argument, that the cost of reconstructing the temples on another site fully equals the increased cost of the double dam—at Philae and Assouan. *Cf.* also a letter by H. H. Statham in *Times*, Feb. 27: leader in *Times*, Feb. 24: account of meeting of Soc. for Preservation of Monuments of Anc. Egypt, in *Times*, Feb. 24.

The leader in the *Times* of Feb. 24 supports the attitude of Mr. Garstine, Under Secretary of State in the Department of Public Works in Egypt, and Mr. Willcocks, Director-General of Reservoirs, who drew up the report favoring the plan which involves the submersion of Philae. Later communications are given in the *Times* of March 13.

QASR IBRIM.—Prof. Sayce spent a day and a half at Qasr Ibrim, and discovered a large stele, containing fifteen lines of hieroglyphs, on the western face of the hill immediately to the south of the old fortress. He copied the text with the help of a glass, and found that it was a record of the conquest of the Nubians and Negroes by Seti II, as well as the terms imposed upon them. The cartouches, however, which are twice repeated and very clear, are exceedingly puzzling; since while the first is that of Seti II, the second is, with a slight variation, that of the rival king Amonmeses. This fact gives a new complexion to an obscure portion of Egyptian history.—Prof. Sayce's letter (q. v. for details) in the Academy, Feb. 24.

SAKKARAH.—Excavations by M. de Morgan.—We regret not to be able to give any account as yet of M. de Morgan's excavations and investigations at Sakkarah, but hope to supply one in our next issue.

In the northern part of the necropolis M. de Morgan has discovered a second crouching scribe, similar to the one in the Louvre. The professional movement and attitude are caught with great truthfulness: we have before us in every detail a real representation of a scribe of the earliest Egyptian period.

WADY-HALFA.—Col. Halkett Smith and Capt. Lyons have continued their work at Wadi Halfa. The two temples of Usertesen I and Thothmes III have been cleared of the sand in which they were buried, and have proved to be highly interesting. Immediately behind the temples Capt. Lyons has discovered a remarkable ditch of fortification cut through the rock, and once strengthened on either side by a wall. Behind the ditch is the necropolis of the ancient city, consisting of

rectangular tombs cut deep in the rock, with a sloping passage at the bottom of each of them, which leads into the sepulchral chamber. One of them was opened by Capt. Lyons, but proved to have been rifled centuries ago. For some interesting Greek and Karian graffiti and proskynemata, see the extracts given above from Prof. Sayce's letters.

NUBIA.

PROF. MAHAFFY'S NOTES FROM NUBIA.—Prof. Mahaffy joined Prof. Sayce near Philae, and has sent to the Athenæum correspondence on the journey between the first and second cataract. The number of scientific travelers who have reported upon Nubia is but small, Gau's inscriptions being the main authority for the Nubian collection in the ⁴C. I. G.' and Lepsius having given his main attention to hiero-

glyphics.

As regards Nubia, the chief points of historical interest are three: What amount of influence had the early Egyptian dynasties over this remote country? what did the Ptolemies effect in the way of civilizing it? what evidence is there for the existence of independent native princes? On all three points we have found considerable additional evidence. Taking the temples in their order from north to south, we find at DeBôt that the inner naos was built by a native Nubian king, Atkheramon, while the pronaos and pylons in front of it (and therefore subsequent) were commenced by Euergetes II, so that the native prince must come into the disturbed period at the end of Ptolemy IV, and during the infancy of Ptolemy V. The Rosetta inscription speaks as if the fifth Ptolemy had recovered all his father's dominions; the constant recurrence of Euergetes II (and no earlier of the series) on Nubian temples seems to tell us that this was the king during whose long reign the southern provinces were recovered for Egypt. Roman emperors from Augustus onward have left ample records of their sway.

The few late and uninteresting votive inscriptions at Gártass are all round a small shrine in the centre of the great sandstone quarries, from which the temples of Philae were chiefly built. At Tehfa we

found a rifled necropolis.

The next place, Kalapshé (Talmis of the Romans), has all the walls of the great pronaos covered with inscriptions. Mr. Sayce counted over eighty of them (fifty-six are given in the "Corpus"), and we succeeded, with the aid of a ladder, in copying a metrical one which has probably not yet been published. Most of them are painted on the stone with red paint, which comes out very clearly when touched with spirits of wine. The well-known inscription of

Silko, king of the Nubians and Blemmyes, we recopied for the sake of verifying the editions of it; the Meroitic (?) text close beside it was copied by Mr. Sayce. There did not seem to us any evidence in the inscription that Silko was a Christian.

High up above Kalapshé is the rock temple of *Bet-el-Walli*, set up by Ramses II, and showing both the merits and the defects of his work; the picture of his conquests over the tribes of Ethiopia are, however, very interesting, and important for this southern history.

At Dendûr, a temple containing cartouches of Roman emperors (misspelt "Autotrator" for *Autokrator* several times), we copied a Coptic inscription on the east post of the south door, which speaks of Theodorus as "Bishop of Phile," a title disputed in the guide-books. He was the bishop who abolished heathenism at Philae about 577 A. D.

At Dakkeh (Pselchis of the Romans) we found the inscriptions very much effaced by the weathering which blowing sand produces even more than rain; but many of the votive texts of Roman officers are still to be read. It is remarkable that while that of Apollonius calls him a strategos, one immediately beneath speaks of him as the afore-mentioned Arabarches, a word known in the late Republican days of Rome for native Syrian princes. Several of the devout call themselves generals, but we look in vain for the most distinguished of them, Petronius, though that name is scratched three times, apparently at random, in the temple of Gártass.

The next place of interest was the rock temple of Gerf Husên, also a work of Ramses II, who seems to have built a large number of small imitations of the vast masterpiece at Abou Simbel.—Athenxum, Feb. 17, 1894.

Over against Dakkeh we went to visit the great brick fort of Koban, which next to that at Semneh, above the second cataract, is the best specimen of the military architecture of the Pharaohs. The plan and dimensions of the fort were taken by Mr. Somers Clarke.

Dakkeh itself gives us good evidence as to the date of the first Ergamenes (Arkamen in hieroglyphs) who was native king of the country. The naos built by him represents him as receiving gifts from Nubian goddesses, whose figures and dress suggest plainly the figures and dress of the present Nubian women, and differ completely from those of the conventional Egyptian deities. He also states that the Pharaoh (Peraa) gives to him the regions of the south. What Pharaoh it was he does not state. But the facts that in his own titles he assumes those of Philopator (Ptolemy IV), and that this is also done by the Nubian king named in my last letter (Atkeramoun at Debôt), show that they must come shortly after, if not in the reign of, that king,

and not of Philadelphus, as Diodorus says. This was Mr. Sayce's very just inference. To me it seemed further probable that the absence of details concerning the Pharaoh, which is unusual in such texts, points to the earliest years of Ptolemy V. (Epiphanes), when this king, being an infant, may not yet have received his official titles. At all events the Nubian revolt, and the temporary cession of the country by the Ptolemies to the native dynasty—that of Ergamenes—are beyond all doubt, and so is the epoch of this cession, which must be placed about 200 B. c. The Egyptian style and the titles of these kings suggest that some at least of the literary classes in Egypt joined in the insurrection, and did work for the Ergamenids. Unfortunately there are no Ptolemaic inscriptions (except the reunant of a dedication to Ptolemy IX) in Greek now to be seen, all the votive offerings being either dated in the reign of Tiberius or later.

Our next stage was Qurt, where but small traces still remain of the temple of Tothmes III, which was restored in Roman times. But the site itself is a quondam island, and on a hill about the middle of this long island was a great mound almost consisting of Roman pottery, and pointing to the island Tachompso of Herodotus, "the level country which the Nile flows round," twelve <code>schani</code> (83 miles?) from Aswân.

At Maharrakah (Hierosykaminon of the ancients), instead of the fifteen votive inscriptions which are to be seen in the "C. I. G," there were not more than eleven still extant, and the temple bore evidences of being upset by an earthquake, which (like that which upset the temple of Olympia) struck it a blow from beneath the pavement, and sent nearly all the walls and pillars flying outwards. Five pillars are still standing, but the very strange plan of the building, drawn by Mr. Somers Clarke, showed that the pillars (six showing sideways and four front and back) were inside, not outside, the cella wall, in which no trace of door is now visible. The remains of a walled passage, leading from a smaller outside building into the southeast corner, suggested that here, at all events, was there access to the sanctuary. Such a plan has no precedent in either Egyptian or Greek architecture. On the smaller building the relief of the holy sycamore is still visible, and figures done in a barbarous mixture of Egyptian and late Roman style. On the centre of the wall of the peribolus (inside), and over against the only door of the naos, are remains in large capitals of a dedication in Greek of which we could only read τιωτου και των ευσεβεσ | τατων γονεων και γαιου | -Μικιου Αδελφ | ου.

This was the southernmost evidence we found of any dedication in Greek, and it was evidently rather Roman than Greek. Indeed,

nothing is clearer than the fact that the Ptolemies did not think it worth their while to civilize this country, or to adorn it with any temples to the south of the Dodecascheenus (Tachompso), for of their predecessors the Pharaohs ample evidences remain. The XI, XII, xvIII and XIX dynasties are all still represented in temples and inscriptions throughout Southern Nubia; of the Ptolemies we could find no trace. Seeing then that we know of the expeditions of the second Ptolemy to Æthiopia for elephants, and of the marble throne set up by the third south of Massowa (inscription of Adule), it seems to follow that these kings used the Red Sea route, and struck into the country from Suakim and south of it. That they should have left no records on the rocks along the Nile, if they had held the country by that route, is almost improbable. I found, indeed, on one of the pillars of the beautiful temple built by Tothmes III opposite Wadi-Halfa, drilled in deeply and in letters four to five inches high, the following .ΠΑCΙΜΕΝΉΟ ΚΥΡΗΝΑΙΟΌ β -ΙΑΣΩΝ ΚΥΡΗΝΑΙΟΣ Α. names: And on the next pillar ADAMAS. But these solitary names, which seem to date from the IV century B. C. (C and E being used indifferently), are only evidence that Greek mercenaries, along with the Carians, who have left several inscriptions on the same building, held the place for some king, possibly for Darius, or even later.

The temple of Debuah, which we next visited, is one of those stupid memorials of Ramses II which only tell us of the king's greatness, and give us long processions of his sons and daughters coming to do him homage. The king's own name is writ very large over every part of the building. But the avenue of sphinxes which led up to it from the river, and most of the temple itself, are buried under the golden sand which is invading and destroying all the western side of the Nubian Nile.—J. P. Mahaffy in Athenæum, Feb. 17 and March 17.

ABYSSINIA.

MR. BENT'S EPIGRAPHIC MONUMENTS.—We give the following abstract of a paper communicated by Prof. D. H. Müller to the Imp. Academy of Sciences at Vienna on Oct. 18, and republished in the Babulonian and Oriental Record (Jan., 1894).

Mr. Bent's journey in Abyssinia took place early in 1893. On Jan. 7 he started from Massauwa, but was kept back by the governor of the Italian colony for several weeks in consequence of the war between the two Abyssinian chiefs Ras Alula and Ras Mangashas, and so was unable to push on to Aksum. He remained for three weeks at Asmara, making several excursions, and leaving there Feb. 6, he arrived at Adowa on Feb. 13. After staying there three days he made

an excursion to Yeha, where he spent two days. Although hostilities had then recommenced, he pushed on to Aksum, remaining therefrom Feb. 21 till March 2, when he was obliged to fly, and was in great danger until rescued by Italian troops. On his way back he passed Digsa and Halai, revisiting the high mountain chain of Kohaito, where the ancient Koloë was situated. He also passed through Adulis, reaching Massauwa March 26.

Prof. Müller received in May squeezes of the inscriptions found by Mr. Bent at Yeha and Aksum. The fragments from Yeha, partly already known from copies of Salt and others, show the oldest forms of the Sabæan alphabet, and belong undoubtedly to the first period of Sabæan history, the so-called period of Mukrab. The ruins are of Sabæan origin, and the colonization of Abyssinia by Sabæans took place about the year 1000 B. C., judging from buildings and inscriptions.

The monuments of Aksum belong to much later periods, and illustrate the change from the Sabæan to the Ethiopic language in every part of its development. Of the bilingual inscription of Aksum, the Greek text was copied by Salt and published in C. I. G.: but the squeezes give a number of important and instructive readings. This Greek text makes it possible to read and translate a great part of the old Ethiopic text which is written from r. to l. in a more recent Sabæan alphabet, and which shows archaic forms and constructions that were lost in more recent Ethiopic. A royal inscription of 29 lines was discovered by Mr. Bent at Ela-'Amida, written in Sabæan characters from r. to l. and in old Ethiopic. It is of special importance because it seems to belong to the father of the king mentioned in the Gheez inscriptions of Aksum.

The two so-called Rüppell inscriptions of Aksum, which are the oldest monuments of the Gheez language in the new left to right vowel-characters, were known only by rather poor copies and were thus an uncertain guide. Being about 800 years older than the oldest Ethiopic manuscripts, their importance is evident. Mr. Bent's squeezes enable us to reproduce the authentic text except in a few places. [There are some passages in the so-called translation from the German of Prof. Müller's article, printed in the Bab. and Or. Record, that are almost unintelligible. So inexcusably barbarous a translation has rarely been imposed upon a suffering public—the squeeze of an inscription is called a "proof-sheet"; appendix becomes "appendit." We learn that "Mr. Sigmund Stiassny, a medical student, who possesses great abilities as an amateur photographer, took over before the beginning of the autumn vacations the long and laborious task to take the photos of the greater part of the "proof-sheets."]

MR. BENT'S EXPLORATONS.—In the Academy of January 13 there is a review of Mr. Bent's book, The Sacred City of the Ethiopians, i. e., Aksum, the object of Mr. and Mrs. Bent's pilgrimage in the winter of 1892-93.

Not the least interesting portion of Mr. Bent's book is that which deals with Abyssinian Christianity. The churches, ecclesiastical ornaments and ceremonies of the Abyssinian faith carry us back to an early period in the history of the Christian religion. The Abyssinian monks on the barren heights of their almost inaccessible mountains present us with a living picture of the ancient hermits of the Thebaid. At Yeha he found numerous monuments of the past in the shape of upright monoliths, splendid temples of hewn and drafted stone, and the traces of terraces for cultivation on the neighboring hills. He makes it clear that Yeha must represent the city of Ave mentioned by Nonnosus, the ambassador of Justinian; and the conclusion is confirmed by a fragment of an inscription found on the spot, in which Prof. D. H. Müller reads the words "the temple of Awa."

The monuments of Aksum belong to a later date, and testify to the influence of the Ptolemies in the Abyssinian highlands. Mr. Bent's photographs and squeezes of them enable us for the first time to determine their true character. Among the most interesting of them are the obelisks, a large number of which still exist. Some of these are merely rude monoliths, but others belong to a later period of highly-developed art. They are carved into the semblance of lofty towers or castles, with a door at the foot and a series of stories above, each of which is provided with windows. The head of the obelisk is rounded and otherwise ornamented, and nail-prints show that it was once covered with a plate of metal. In one case a sort of Greek temple is represented resting on a column, the capital of which is adorned with volutes. At the foot of each obelisk stood an altar, plainly indicating the purpose for which the obelisk was erected.

Besides the obelisks and altars, Mr. Bent found the remains of a temple as well as the pedestals of statues—called "thrones" in the texts—on some of which inscriptions have been cut. Outside the town is a great reservoir of early construction, which is still used; a lioness, carved with considerable spirit on a rock; and a collection of ancient tombs, which are entered by sloping passages.

One of the squeezes gives us what remains of the Sabæan text of the inscription of King Aizan, which had not been copied before. The text is bilingual, in Greek and Ethiopie. Aizan was King of Ethiopia in the time of the Roman Emperor Constantius. Another of Mr. Bent's inscriptions which is new is in twenty-nine lines of Sabæan

characters, and records the victories of Ela-'Amida "king of Aksum and Homer and Raydan and Saba and Salhin and Tiyam and Bega and Kas." It was the son of this king who erected the inscription discovered by Salt in 1808, and subsequently copied by Rüppell and d'Abbadie.

EAST AFRICA.

HISTORICAL RESULTS OF MR. BENT'S JOURNEYS. — Prof. Dillmann read a paper on Jan 11, before the Berlin Academy of Sciences, on the historic results of Theodore Bent's travels in East Africa. He shows that a German, Karl Mauch, preceded Mr. Bent in 1871 in his discovery of Zimbabye, some 40 miles inland from the Portuguese station Sofala, between the Zambesi and the Sabi. Although there exist many other ruins of similar character in this region, along the upper Sabi, the northern affluents of the Limpopo and the southern affluents of the Zambesi, Zimbabye appears to have been the largest and most important. For these facts and for a summary of Mr. Bent's book, see under Book Reviews, on p. 224.

Dillmann gives a careful description of the ruins, mainly summarized from Mr. Bent. But his main object is to inquire to what race its inhabitants belonged. They were a foreign race, established, however, in the land for generations, perhaps centuries, to judge from the character of the remains of their civilization. Their religion was similar to that of the early Semites-nature worship, cult of the sun, of stones, phallic worship. They were acquainted with astronomy and practised art and industry. Bent leans to the opinion that they were Arabs of the Sabseo-Himvaritic period. All Greek and Roman geographical authorities agree in stating that the South Arabs had the monopoly of the trade along the shores of the Indian Ocean, and from their emporiums supplied the northern peoples with all the products of this region. The Periplus maris erythræi, of the time of Pliny, seems to prove (with Schlichter1 and against Glaser2) that the journeyings of the Greeks did not get beyond Azania—the present Somali coast. Had the trade with Mashonaland been then in activity, it is hardly possible that such a fact could have remained concealed from merchants and geographers. Nor is it possible to suppose that this region was opened up after the second century A. D. We must therefore agree with Schlichter in believing the settlement to date back even of the last centuries B. C.

The choice lies between Phoenicians and Sabaeans, and there are many arguments in favor of the Sabaeans. In the first place, the land

¹ In Petermann's Mittheilungen, 1892, p. 284.

² Skizze und Geschichte der Geographie Arabiens, II, p. 206.

of the Sabæans is always spoken of in antiquity as the source of gold, and Zimbabye, of course, was settled on account of its gold mines. Then the construction in regular cut stones, without mortar, the curved and oval walls, are parallel to many examples in Saba. The only difficulty is that no inscriptions have thus far been found, whereas the Sabæans usually employed them quite profusely. The religious tenets of Zimbabye also agree entirely with the Sabæan. It is true that there are several parallels to the Phœnicians that can be pointed out, but they are not as complete or as convincing as the Sabæan parallels.

Prof. Dillmann also reviewed Mr. Bent's Ethiopian journey, showing its importance for the earliest history of the Kingdom of Axum (Bent, The Sacred City of the Ethiopians) in the wealth of material which he has made available to the scientific world. Excavations were impossible on account of local fanaticism. One of the inscriptions found at Yaha is placed by Müller as early as the seventh or eighth century B. C.; and if this is a correct opinion, the entrance of the Sabæans into Abyssinia would be far earlier than had been supposed, and their colonization of North Africa would then agree in date with the theory of their advance into South Africa in the reign of Zimbabye. D. is not disposed to accept Bent's identification of Yaha with the ancient Abá, Aba, Ava, as the text of Nonnosus would appear to place Ava in a different location. At all events, Yaha must have been a very important centre of Sabæan colonization in the pre-Axumitic period.—Sitzungsber. Akad. Wissensch. zu Berlin, Jan. 11, 1894.

Discovery of Roman Coins.—It is an interesting fact that some local traders report the discovery by a Mashona native of eight coins in a fair state of preservation in the neighborhood of the ruins of Zimbabye. They are undoubtedly Roman; four are inscribed constantive caes., two others bear on the obverse the head of a woman and the inscription Helena avgveta, and one represents the wolf suckling Romulus and Remus.—London Standard, May 8.

ALCERIA AND TUNISIA

BOU-FISHA.—Pegasus and the Nymphs.—A terracotta tile found in the ruins of a Christian chapel at Bou-Fisha reproduces the rare subject of the nymphs attending to Pegasus. One is giving him to drink, a second, crouching, cleans his feet, while a third grooms his neck. This composition is the exact parallel to that in the tomb of the Nasoni on the Via Flaminia. The site of the scene is the spring Hippokrene, created by a blow of the foot of Pegasus, and this is indicated in the tile by a female figure pouring water from an urn above her

head into the vase from which Pegasus drinks.—Bull. Soc. des Antiquaires, 1893, p. 80.

CARTHAGE.—The Harbours.—South of the citadel of Carthage are two large marshes, in the lowland between the hill and the shore. The northern marsh has about the shape of a crescent; the southern marsh is oblong and traversed by a road resting on a dyke. According to all authorities in Carthaginian topography these marshes occupy the site of the ancient ports; that to the north, originally circular, with a circular island in its centre, being the military port, while that to the south, primitively rectangular, was the merchant port. One canal put the two in communication, and a second connected the merchant port with the sea.

Mr. Cecil Torr has advanced a different theory which he has expressed in articles entitled: "The Harbours of Carthage," in the Classical Review, 1891, p. 280, sqq; and 1893, p. 374 sqq. Compare also "Die Häfen von Karthago," by R. Oehler, in the Jahrbücher für Klassische Philologie (1893, pp. 321–32). The latest presentation of Mr. Torr's views is found in the Revue Archéologique for Jan.-Feb. 1894, pp. 34–47.

Mr. Torr's first step is to show that whereas Appian, in his detailed description of the inner port states that it contained docks to receive 220 vessels and whereas the almost contemporary Athenian docks show that a front length of about 1,433 metres would be required for these vessels, and whereas only about 1,075 metres frontage are afforded by the northern marsh, it follows that this marsh could not have been used as the inner port of Carthage.

The outer port of Carthage was called Kothon; this is to be inferred from passages in Festus, Servius (ad Virg.), Diodorus, etc. Festus says this name was given to artificial ports made in the sea. Apparently only one other port received this name—that of Hadrumetum. As was to be expected this port of H. was made by jetties. It is, therefore, certain that the outer port of Carthage was an artificial port made by jetties. This demolishes entirely the received theory of the present marshes. It appears certain that the circular inner port was flanked on either side by a canal by which direct communication was maintained between the city and the outer port. It is not proven whether this inner port was artificially formed by jetties within the outer port, or situated inland in an excavation, for there are indications that the inhabitants excavated ports at an early date.

Finally Mr. Torr attempts to locate the port exactly. Appian says that the Kothon was square at one end and rounding at the other. Mr. Torr places the square termination at the south, at the further

end of the promotory opposite the hillock, while he believes that the northern end continued the curved line of the hills where they touch

the shore. The pretended port of Utica—a rectangular excavation with an island on which are ruins, is shown to be, like one near Car-

thage, not a port but baths.

Since the above note was put in type we find a further criticism of Mr. Torr by Otto Meltzer in the Jahrbücher for 1894 (pp. 49–68 and 119–36), who upholds the orthodox view, and to whom he replies in the Classical Review, June, 1894 (pp. 271–76). For a restatement of the various theories we refer to these articles, as we cannot spare the space to summarize them in the Journal. Mr. Torr's position, in a few words, is this: "My theory is that the ponds have nothing whatever to do with the harbours. I am of opinion that the outer harbour was formed by piers in the sea; and also of opinion that the inner harbour was nearly surrounded by the outer harbour, but that its position is otherwise unknown."

HADJEB-EL-AYOUN (NEAR KAIRWÂN.)—In an article published in the Rev. Arch. in 1888, M. de la Blanchère illustrated a series of terracotta tiles, decorated with figures or ornaments, found in Tunisia. The majority bear rosettes, deer, lions, peacocks, oxen; others have Christian or Pagan subjects such as Pegasus cared for by the Nymphs, and the sacrifice of Abraham; while on one is an inscription between two crosses + sct maria aivba nos + (Cf. Journal, IV, 473, 544).

M. Hanezo has lately discovered at Hadjeb-el-Aïoun, 60 kilom. south-west of Kairwân, in the ruins of a basilica, another similar series of tiles with Christian subjects. They have been communicated by MM. Cagnat and Gauckler to M. Le Blant, who illustrates them in a paper in the Revue Arch. 1893, II, pp. 273–80. The subjects are: (1) Adam and Eve, with nimbus, standing on either side of the tree around which the serpent is twined: (2) Christ standing between two apostles, all being nimbed, and multiplying the loaves and fishes: (3) S. Peter, with nimbus, receiving a key from the hands of Christ: (4) the sacrifice of Isaac, who kneels in front of the altar while Abraham raises a sword in his right hand: (5) Christ and the Samaritan woman at the well.

Each of the above subjects, as well as a number of figures of animals in the same series, are framed by a colonnette on each side. At the time of discovery several of the tiles still adhered to the walls of the basilica of which they formed the dado. To judge from the form of the letters in the inscription already published the tiles date from the second half of the sixth century.

The hall in which the tiles were found is paved with a mosaic representing doves within scroll-work with a border at each end containing three fish.

OUDNA. (TUNISIA). - A ROMAN VILLA. - A letter from Tunis to the Revue Archéologique (1894, 1, 115) informs us that the excavation of the ruins of a Roman villa at Oudna, under the direction of the Service Beylical des Antiquités, is being carried on successfully. After completing the uncovering of the first building whose eight chambers were paved with mosaics, M. Gauckler is bringing to light a second structure situated opposite the first and connected with it by two wings of less importance, surrounding a vast peristyle. The first hall, starting from the east end has a mosaic of glass cubes on a white marble ground. The scene represents a series of wild and domestic animals, among which are a war elephant, a superb stallion, a leopard with shimmering fur, artistically rendered by a mingling of cubes of brilliant colors in with the dark tones of the fur. Broad scrolls of acanthus ending in lion heads separate the groups. To the N. of the hall is a wide drain leading to a vaulted reservoir composed of two basins of unequal dimensions separated by a narrow neck, the larger basin being

in the shape of a gigantic bottle placed on its side.

South of this hall is a second room connected with it by three openings-a narrow door at each end and a wide opening in the centre to be closed by a velum. On the sill is a hunting scene; to the right a hare and a fox are in full flight closely pursued by two levriers d'Afrique or slougues whose names are given in mosaic inscriptions as EDERATYS and MYSTELA. Two unarmed horsemen follow, mounted on Numidian stallions in full gallop, urging on their steeds with voice and gesture, and flourishing one a whip and the other a houssine. Behind them, leashes in hand, is the slave who has let loose the dogs, The grouping is fine, the action lively and the preservation perfect. Through this door we reach an atrium ten metres square whose ceiling was sustained by two colonnades, the lower part of which is still in situ. The columns are of calcareous stone entirely covered with stucco, including both capital and base. The border of the mosaic pavement is geometric, composed of stars and rosettes. Then comes the framework of the central composition measuring five by six metres. This framework consists of a garland of varied flowers and fruit analogous to that of the great mosaic at Sousse but superior to it in execution. The decorative arrangement recalls that of the great mosaic of Kourba (Curubis) uncovered last year and transported to the Bardo Museum. At each of the four corners is a large vase decorated on their body by a procession of female figures (Muses?) holding each other by the hand. From each vase proceed two vines laden with leaves and fruit whose branches form a green trellis among which flutter birds and erotes. There are 28 of the genii with transparent many-colored wings and plump, rosy bodies, running from branch to branch picking the grapes. The drawing, generally considered, is good, but there is no true perspective and there is evident disproportion between the figures. In decorative and archæological value this mosaic ranks as the best found in Tunisia. The hall where it was found corresponds, in the second building, with that in the first building in which was found the mosaic of the Rape of Europa.

ASIA.

IS THE SOURCE OF EUROPEAN CIVILIZATION ORIENTAL?—Two late numbers of L'Anthropologie contain articles by M. Salomon Reinach, entitled "Le Mirage Oriental." They represent the furthest swing of the pendulum, in the reaction which has been making itself felt during the last dozen years, against the extreme view which would find the sources of all civilization in the East. After expressing his agreement with Pictet's theory of a European origin for the Aryan group of languages, with Halévy's theory of an Aramæan origin for Indian writing, and with Darmesteter's theory of a late date for the Avesta, M. Reinach proceeds to his main argument, which is to refute the opinions of Bertrand and De Mortillet, that the prehistoric civilizations of Western Europe are due to Oriental influence. Reversing the common view, he even goes so far as to maintain that wherever and whenever bronze, and therefore tin is found, it must have come from the Cassiterides or Celtic Islands of the West.

In his second paper he deals with the Aegean civilization: that is to say, with the discoveries of Schliemann and Prof. Flinders Petrie, in connexion with all the other archæological evidence. His main thesis is that the culture represented is not due to Egypt or Chaldea, though it may show contact with both; but that it is essentially Western and European. He admits that there must have been in the remote past periods of progress, affected by external stimulus, and also periods of stagnation and even of decadence. But, on the whole, he maintains that the greater part of Europe in prehistoric times shared a common civilization, which was not derived from Egypt or from Phœnicia. The original source of it he would place in Central or perhaps in Northern Europe, whence it radiated south in all directions—to Spain, Italy and Sicily, Greece and Asia Minor. He goes so far as to fit into his theory such intractable material as the Hittites, the Etruscans, and the Pelasgi. Apart from its boldness, a special feature

of his theory is the allowance it makes for the flux and reflux of hostile influences, and for successive waves of migration. Following Prof. Petrie, he would date the first contact of Europe with Greece as early as the twenty-eighth century B. C.—Academy, February 24 and March 17.

ARABIA.

DR. GLASER'S SECOND EXPEDITION.—Several years ago the German traveler, Eduard Glaser, discovered a large number of Semitic inscriptions in Southern Arabia, and, when these were deciphered, it was discovered that they brought intelligence of the existence of Minæan and Sabæan kingdoms and of a knowledge of letters in those districts many centuries before Christ. In the interpretation Glaser was materially assisted by Dr. Hommel, of Munich, and Dr. Müller, of Vienna. In addition it was also learned to a certainty that the representatives of the Semitic peoples in Africa, the Abyssinians, were originally established in Southern Arabia. The important results of these discoveries have been repeatedly announced in this Journal.

Dr. Glaser has recently returned from a second expedition and has brought with him copies of some eight hundred inscriptions and two hundred and fifty Arabic manuscripts, as also specimens of Arabian antiquities of various kinds. He has been helped in his researches by the Bedouins, whom he had taught to make squeezes of inscriptions. These are able to penetrate regions practically inaccessible to the white traveler, and bring materials for research he could otherwise not get. The new finds have not yet been interpreted.—N. Y. Independent, May 24.

BABYLONIA.

TELLOH.—We have not seen any full account of the more recent excavations by M. de Sarzec at Telloh, which he has been carrying on steadily and with good results for the last two years or more. M. Heuzey has, however, communicated to the *Acad. des Inscriptions* some notes on objects found in the course of these excavations.

Especially interesting is a colossal lance-head of copper or bronze, at the base of which is a royal inscription not yet deciphered. M. Heuzey believes this to be one of the sacred arms preserved among other objects of worship in the temples, and which is one of the attributes of Izdubar or Gilgames, the Babylonian Herakles. [It is probably one of the originals that are copied in the religious scenes cut in the Babylonian cylinders, where the sacred lance is stuck upright in the ground or on an altar, as a divine emblem and object of worship.—Ed.]

A number of objects are mentioned by M. Heuzey as being already in the museum at Constantinople, where he has studied them. Foremost are some magical statuettes of the time of the early King Ur-Nina, in the form of female busts ending in a long point. These statuettes, made of pure copper, were stuck directly into the ground and supported on their heads stone votive tablets. They were evidently for the purpose of warding off the spirits of the under world. M. de Sarzec also discovered numerous stone lion-heads, with a hole for a peg, which served probably as the ends of the arms of a royal throne. One of these heads, in the Louvre, bears the name of King Ur-Nina; another at Constantinople contains the name of the land of Magan, the undetermined country whence the Babylonians got the stone for their statues.—Revue Arch., 1894, 1, 108, 109.

At a later meeting, in April, M. Heuzey gave a general account of the manner in which M. de Sarzec, now consul-general, has been exploring the earliest archæological strata. Among his most recent discoveries are two more fragments of the famous early bas-relief called the *Stele of the Vultures*; a number of inscriptions; a series of bronzes or even works in copper, among which are to be noted two bull-heads, with eyes incrusted with mother-of-pearl and lapis lazuli, a technical process sometimes found in the earliest monuments.— *Chron. des Arts*, No. 16, 1894.

NIPPUR=NIFFER.—Nothwithstanding every effort, the editors of the Journal find it usually more difficult to obtain information regarding archæological work undertaken by Americans than of that carried on by foreigners. We offer this to our readers as an explanation of the lack of prompt and first-hand information concerning the discoveries at Niffer. The earlier work there under Dr. Peters has been described in previous issues.

At the recent annual meeting of the American Oriental Society, on March 29–31, Mr. Talcott Williams made a very interesting statement, summarized in the N. Y. Independent of April 12, regarding the digging now going on in the ruins of Niffer. Mr. Haynes has since last spring been continuing the work begun there previously by Dr. Peters, and in the first ten months has taken out from the débris 8,000 inscribed clay tablets and fragments, besides other objects. More remarkable is the fact that Mr. Haynes has dug below the levels of the débris from the time of Sargon I (3800 B. c.), and has found inscriptions in this deeper stratum. It seems probable, therefore, that we are now to have revelations of a still earlier period of Babylonian culture. The results of the work of Dr. Peters were important, and the continuation of the work will probably prove vastly more so. To be noted

are the cordial relations of the expedition with the Turkish Government, and the generosity of the Turks in allowing many of the objects found to come to this country. At the meeting of the Am. Or. Soc. Mr. Williams and Dr. Ward paid due tribute to the self-sacrificing labors of Mr. Haynes in connection with the work at Niffer. With a small Turkish escort he is alone in the desert, no European near, surrounded by the rude and often turbulent natives, and continuing his work through the last summer, the heat at times reaching 118° in the shade.

Professor Hilprecht, of Philadelphia, who is publishing the inscriptions dug from the temple of Bel, at Niffer, reports that he hopes to have Part 2 of Volume I in the printer's hands before leaving for Constantinople and the Hittite region in May.

of the American Oriental Society (March 29–31) Dr. Wm. H. Ward read two interesting papers on the classification of two classes of Oriental cylinders—Hittite and Mesopotamian. They bring new light into a difficult field, and will be welcomed by the custodians of museums where such objects are collected. The ancient seals have a great deal to tell us regarding history, art and religion, and such a classification as these papers propose will aid much in the study. Seals with Hittite inscriptions were for the first time made known and their style gave a sure basis for the accumulation around this nucleus, of a large Hittite series.

ASSYRIA.

INSCRIPTION OF RAMMAN-NIRARI.—In connection with the paper on the recently discovered tablet of Ramman-nirari, read by Dr. Lyon at the American Oriental Society (March 29–31), the original, an alabaster slab, about 10x13 inches, was exhibited and explained. The tablet is a duplicate of one in the British Museum and commemorates the restoration of an Assyrian temple in the fourteenth century B. c. The stone is beautifully written, well preserved, and the variants from the British Museum duplicate very interesting. The original scribe made various mistakes, and there are several erasures and corrections by the hand of a reviser.—N. Y. Independent, April 12.

PERSIA.

PERSIAN CERAMICS. —Mr. Henry Wallis is about to publish another superb volume on Persian Ceramic art, enriched with plates after drawings made for the purpose from specimens belonging to the rich collection of Mr. F. D. Godman, who has done so much to increase

our knowledge of this branch of Mohammedan art. The first volume dealt with Persian vases of the XII century; this new volume is concerned with the similar, but superior, and generally less injured tiles of the same epoch, the decorative motives of which evince a great advance in design. For their color and design the tiles may fairly be considered the finest specimens of Oriental Ceramic art. The volume contains forty chromo-lithographic plates.—Athen., March 24.

PALESTINE.

JERUSALEM.—New Excavations.—The chairman of the Palestine Exploration Fund has received a letter from the Foreign Office informing him that a Firman has been granted by the Sultan for permission to excavate in Jerusalem for two years on the usual conditions. The committee will, therefore, be able to resume the excavations which proved so successful under Sir Charles Warren in the years 1867-1870. The task of superintendence has been entrusted to Mr. Frederick Jones Bliss, who is already at Jerusalem, and will commence work without delay.—Acad., March 24.

SYRIA.

SINJIRLI.—Some reports of the Sinjirli excavations by Dr. von Luschan have been made from time to time. Recently the Berlin Mittheilungen aus den Orientalischen Sammlungen, 1893 (Heft XI), gave a lot of new details based on the new diggings made in these interesting remnants of Hittite civilization and literature in the Amanus regions north of the gulf of Antioch. In addition to a number of other valuable finds of historic importance in connection with Hittite architecture and sculpture, a large memorial stone tablet of the Assyrian King Esarhaddon has been found, in which in cuneiform inscription the king reports his victory over the Ethiopian and Egyptian King Tirhaka (cf. Is. 37:9). The vanquished king, whose physiognomy is that of a genuine Negro, is reported in the inscription to have been pursued into Egypt, his son, Usanakhuru, falls into the hands of the victor and is put into chains. Memphis is captured, etc.—N. Y. Independent, May 24.

DAMASCUS.—BURNING OF THE MOSQUE.—The famous mosque of Damascus was nearly destroyed by fire last October, but the Turkish Government, regarding it in the light of a national calamity, and fearful of the effects upon its subjects, have successfully concealed the fact till recently. From a letter in the London Times it appears that while the library, containing many priceless manuscripts, was saved, the greatest literary treasure of the Mahommedan world was destroyed.

This was the only remaining one of the four copies of the Koran made by order of the Caliph Othman in the year A. H. 30 (A. D. 650-1). All other copies were collected and burned at that time, and these four were deposited in Medina, and the three metropolitan cities Kufa, Bassorah, and Damascus. These constituted the binding authority for the text, and the later manuscripts have been derived from them. The Damascus copy, of whose genuineness there is said to have been no doubt, was not kept with the library but in a separate place in the mosque, and was unfortunately forgotten until it was too late to rescue it. The minarets and the tomb of Saladin are uninjured, and some of the walls of the main building are standing. Among them is one which formed a part of the cathedral of St. John the Baptist, which Omar found on this spot at the time of his conquest in A. D. 635, and on which is the remarkable Greek inscription still legible, "Thy kingdom, O Christ, is an everlasting kingdom, and Thy dominion is from generation to generation."—Nation, March 15.

ASIA MINOR.

EPHESOS.—The Gold Coinage of Thibron.—At a sitting of the Soc. des Antiquaires M. Babelon described two gold coins of Ephesos, a stater and a hemi-stater. They were coined at Ephesos in 400 B. c. when the Lacedæmonian harmost Thibron or Thimbron came there to organize an army to protect the Greek cities of Asia menaced by Tissaphernes after the retreat of the Ten Thousand. Ephesos was Thibron's base of operations, and he coined gold coins as military chief in the field after he had exhausted his supply of daries. Only twice did the mint of Ephesos, which was so prolific, put gold coins in circulation: once this Thibronian coinage in 400; a second time from 88 to 86 B. c. when Ephesos allied herself to Mithridates and prepared to assist him against Rome. Therefore, at Ephesos as at Athens the coinage of gold has a military and exceptional character.—Bull. Soc. des Antiquaires, 1893, p. 84.

HALIKARNASSOS.—M. Michon publishes in the Bull. corr. hellen., 1893, p. 410, pl. xvi, a draped female statue from Halikarnassos, now in the Louvre. Its first owner was M. J. de Breuvery, who travelled in the Orient in 1829, visited the site of Halikarnassos, and there secured this statue and an altar. The head and the left arm, cut separately, are wanting, as well as the greater part of the right arm. The type is severe and monumental, and evidently the statue was part of the decoration of a structure. It has been generally regarded as a caryatid from the Mausoleum itself. M. Michon, however, thinks this doubtful, and accepts only with a query M. Rayet's date of the middle of the fourth century.

LYDIA. - EPIGRAPHIC AND GEOGRAPHICAL STUDIES. - In the Mitth. Athen., 1894, p. 102-132, K. Buresch contributes to Lydian Epigraphy and Geography. An inscription from Antiocheia on the Maeander is published, giving a list of cities which joined in honoring some unknown person. The δημος δ Καισαρέων is identified with Tralles. Cf. Plin. N. H. V. 120. The Trallians probably adopted this name in gratitude for assistance rendered by Augustus after the earthquake of 26 B. c. After Nero's time the new name occurs only combined with Toalliavoi, and in this combination it is found even in the early part of the third century after Christ, though only in official language. The titles of νεωκόρις and μητρόπολις της 'Aσίας were probably given to Tralles by Caracalla. These results are derived from coins and inscriptions of which two are published. The Νεοκαισαρείς of the inscription are shown to be the Philadelphians. The Mysomakedones are shown to have lived near Mt. Tmolus, probably either to the east or south-east. The sites of several other towers of Lydia are determined.

COINAGE OF LYKIA.—M. Babelon remarks in a recent article in the Revue Numismatique (1893, No. 3). "The Cabinet de France (Bib. Nat.) has been recently enriched with a considerable number of coins of Lykia. The majority of these new pieces belong to the dynasts who coined money in their own names in different Lykian cities during the v and vI centuries. This interesting section of our national collection of coins, which had remained stationary for more than a quarter of a century has thus been suddenly about doubled in number and importance. I have described and reproduced these coins of Lykian dynasts in the volume of the Catalogue of Greek coins just issued under the generic title The Persian Achaemenidae." An examination of this work will show how rich is our series of primitive Lykian coins without royal names; will disclose names of dynasts heretofore unknown, such as Utévés and Khadritimés; will show the great variety of the monetary types of Spintaza, Tethiveibis, Kuperlis, Kheriga, Kreis-the national Lykian hero whose glory is celebrated on the great stele of Xanthos-, Vexêrês, Denevelês, and Perikles. The plates of the Catalogue bring to view strange types, such as the "triquêtre" with arms ending in cock's or swan's heads, and also beautiful heads of dynasts, the earliest monetary effigies ever struck, with the exception of the standing effigies of the Achaemenid princes on the daries.

MAGNESIA (ON THE MÆANDER).—EXCAVATIONS IN THE THEATRE.—In the Mittheil. Athen. (1894, pp. 1-92), F. Hiller v. Gaertringen, O. Kern and W. Dörpfeld give an account of Excavations in the Theatre of Mæander (plates I-IV; 17 cuts). After an introduction on the state of the site

and the history of the excavations, Hiller v. Gaertringen discusses 64 inscriptions, a number of masons' marks being counted as one. The inscriptions are for the most part honorary and dedicatory. One (No. 5) in honor of Anaxenor contains the lines of Homer (Od. IX, 3 sq.) with the omitted iota subscript (i. e., adscript) mentioned by Strabo XIV, 1, 41, p. 648. Another (No. 37, given in fac-simile) mentions an artist Apollonios, son of Tauriskos from Tralles. The artists of the "Farnese Bull" were Apollonios and Tauriskos of Tralles, but cannot both be identical with the persons of this inscription as they were sons of Thenekrates or Artemidoros (Plin. xxxvi, 34). Probably the Trallians of the Magnesian inscription belonged to the same family with the others, and possibly Tauriskos the father of Apollonios may have had a brother Apollonios, in which case it is not necessary to assume more than one Tauriskos.

O. Kern publishes and discusses a marble basis in the form of a table-tripod. The legs end in claw feet and are adorned with many lines, perhaps veins. Between two of the legs is a Hermes standing

on a plinth with the inscription:

Έρμης εἰμι Τύχων, ἐκ Χαλκίδος οὖτος ἐκεῖνος ᾿Αντίλοχός μ᾽ ἐποίησε πολίταις πᾶσι χορηγόν.

This is a tripod-statue, like the satyr ἐπὶ τριπόδων of Praxiteles. The character of Hermes Tychon is discussed. He appears to have been the genius of luck.

Dr. W. Dörpfeld treats of the theatre building itself. The cavea had two diazomata, now not to be identified owing to the destruction of this part of the theatre. The lower diazoma was reached by stairs from the parodoi. There were five cunei in the lower part, probably more higher up. Little remains of the seats, but enough to show that they were not, as is usual, made of one stone. Cavea and orchestra have the form of a lengthened semicircle or truncated ellipse. In Greek times the orchestra proper was a circle, and had a passage about it, which served also as a drain. The erection of the Roman logeion cut off part of the orchestra. A subterranean passage similar to that at Eretria (A. J. A. VII, p. 43), existed in the Greek theatre probably from the centre of the orchestra to a point under the "scene-building." A Roman passage in the form of a T begins under the front wall of the Roman logeion, and ends in two short branches near the middle of the orchestra. The theatre was built in the fourth century B. c. (probably). and not much later the skene received additions. Early in the second century B. c. it was rebuilt in marble. Several centuries later it was changed by the erection of a Roman logeion before the proskenion. The theatre was probably destroyed about 263 A. D. The remains of this theatre furnish confirmation for the view that the action in the Greek theatre took place in the orchestra. Connected with the theatre was a building of five rooms of different dates the purpose of which is uncertain.

Otto Kern publishes in the Mitth. Athen. (1894, pp. 93–101) Theatre-inscriptions from the Agora in Magnesia on the Mæander (plate v). These consist of three almost complete records of victors in the theatrical contest at the Pωμαΐα besides three fragments. The inscriptions belong probably to the first half of the first century B. c. The names of writers of tragedies, comedies, and satyr-dramas, as well as those of the chief actors are given. The proof that satyr-dramas continued to be performed at this time is important. The names of the tragedies are similar to those of the fifth century when not actually identical with them. One comedy, by Metrodoros, son of Apollonios, bears the familiar title "Ομοιοι. The names of these otherwise unknown poets are: Tragedians: Theodoros, Polemaios, Glaukon; Comedians: Metrodoros, Agathenor, Diomedes; Satyr-dramatists: Theodoros, Polemaios, Harmodios, Theudoros, Polemon. Of these last, two are identical with the tragedians.

PERGAMON.—THE EX-VOTO OF ATTALOS AND THE SCULPTOR EPIGONOS.—Under the above title M. Salomon Reinach publishes a study in the Revue des Études Grecques (Jan.-March, 1894), which is mainly an examination of an article by Adolf Michaelis in the Berlin Jahrbuch d. Instituts. Since Brunn's article in 1870 (Annali, 1870, p. 292) it is admitted that there exist partial replicas of two of the groups of statues set up by the Kings of Pergamon in honor of their victory over the Galatians. These are: (1) Dying or fighting Gauls, Amazons, Giants and Persians, from the groups dedicated on the Athenian Akropolis, mentioned by Pausanias. They were found in Rome early in the xvi century. The original comprised four sets of small figures relating to the contest of gods and giants, of Athenians and Amazons, of Athenians and Persians, and of Asiatic Greeks with Gauls or Galatians. In each case it is probable that the vanquished alone were represented. (2) A series of large statues in gable-like arrangement, probably on the Akropolis of Pergamon: of this there remain the statue of a Gaul in the Capitoline Museum, called the Dying Gladiator, and the socalled Arria and Paetus at the Ludovisi Villa, which even Raoul-Rochette recognized to be a Galatian killing his wife and himself.

In 1889 M. Reinach himself published a paper on *The Gauls in ancient art* (see Journal, 1889, p. 259) which included a study on derivatives of the Pergamene ex-votes. Michaelis has added considerable new information: but in the present paper M. Reinach differs

from some of his conclusions, especially in so far as they relate to a group of a woman lying dead while a child is still hanging to her breast. A XVI century drawing of this group has been found by Michaelis at Bâle, and this shows that the group from which it was copied, now in the Naples Museum, was changed by a XVI century restorer who removed the child. M. Reinach seeks to explain the discrepancy of the Amazon costume of the woman and her carrying a child, as an artistic license referring to the Galatin habit for the mothers to carry their children with them in battle. This group M. Reinach would attribute to the sculptor Epigonos (see Pliny) and in view of the fact that the name of Epigonos has been found on five bases of statues at Pergamon, he believes that in Pliny's text we should read this name instead of the corrupt reading Isigonos among the sculptors of the commemorative groups.

Against the opinion of Michaelis, Reinach does not believe that the Athenian groups are by the hand of Epigonos, i. e., the same artist who executed the Pergamene figures. He restores the Pergamene groups as follows: in the centre of the gable the suicide scene (Ludovisi group): on the right, the dying Gaul of the Capitol; and on the left the dead Galatian mother with her infant. The sculptor of the Athenian groups, in imitating this motif, corrupted it by turning the mother into an Amazon, because there was no place for Galatian

women in his composition.

RHODES.—Dates of Artists.—In the Jahrbuch d. k. deut. arch. Inst. (1894, pp. 23-43), F. Hiller v. Gaertringen discusses the Dates of the Rhodian Artist's Inscriptions. Nine fac-similes of inscriptions are given (Sitzungsber. d. Berl. Akad., 1892, p. 845 ff.; Mitth. Athen., 1891, p. 110, iv and 4; a new inscription signed Επίχαρμος Σολεύς φ ά ἐπιδαμία δέδοται καὶ Ἐπίχαρμος Ἐπιχάρμος Ρόδιος ἐποίησαν; two parts of an inscription, Bull. de Corr. hell., 1890, p. 277 ff.; an inscription -ένης Δημητρίου 'Ρόδιος ἐποίησε; Löwy, Inschr. gr. Bildh. 546, and elsewhere; a new inscription Φύλης Πολυγνώτου 'Αλικαρνασσεύς εὐεργέτας ἐποίησε; Mitth. Athen., 1891, p. 120 ff., from drawings by Koldewey. As the result of the discussion of these and other inscriptions it appears that Rhodian art had a history of almost two centuries. The earlier artists wrought during the latter part of the third and the earlier part of the second century B. C., the later ones in the first half of the first century B. c. Several names of artists are found between these periods, but after B. c. 43 Rhodian prosperity and with it Rhodian art was destroyed. If the combination of the Rhodian Hagesander et Polydorus et Athenadorus, whom Pliny N. H. XXXVI, 37 mentions as artists of the Laocoon group, with the Hagesandros and Athenadoros of inscriptions is warranted, as seems

to be the case, the Laocoon is to be assigned to about the second quarter of the first century B. C.

TRALLES.—EXCAVATIONS.- In the Mitth. Athen. (1893, pp. 395-413; pls. 12, 13; 4 cuts), C. Humann and W. Doerpfeld report on Excavations in Tralles. Humann describes, with map, the site of Tralles on a hill above the modern Aidin, and the course of the excavations, carried on for four weeks in October, 1888, under Turkish auspices, but at the expense of the Oriental committee in Berlin. The ancient city has furnished a great part of the stone for building Aidin, and tentative diggings in several places resulted only in unimportant finds of sculptural fragments. The theatre was partially excavated, and Doerpfeld describes the results. The orchestra was more than a semi-arch, perhaps originally a circle. The original floor was probably of earth, later covered with marble slabs. An open drain surrounded it in the early period. The diameter was then 25 m., later 26.40 m. Under the orchestra was a passage, similar to those found at Eretria and Magnesia, of Roman date. The cavea had two diazomata, and, in the lower part, was divided into eight cunei. The seats were made of a separate piece from the foot-rests. The front row of seats had arms at the aisles. The "scene-building" was about three metres high and six metres wide, supported upon three rows of columns, the middle row being double columns. A wall hid the columns from the orchestra, but perhaps this wall and even the row of columns next it belonged to a restoration. This structure cannot have been a real stage, as actors on it would have been partially hidden from spectators sitting in the lower part of the cavea. A flight of stone stairs seems to have led from the middle of the "scene-building" into the orchestra. The "stage-building" extended from side to side of the orchestra, leaving no room for parodoi. The orchestra was entered by passing under part of the "scene-building" and the last seats of the cavea. The exact dates of the building and rebuilding of the theatre cannot yet be determined.

KYPROS.

LAPITHOS AND PTOLEMY SOTER.—M. Philippe Berger has communicated to the Acad. des Inscriptions a Phenician inscription found at Lapithos in the northern part of Kypros. Its texts relates to the events that followed the conquest of the island by Ptolemy Soter. It emanates from one of the first governors of the district of Kerynia, a member of one of the great Phenician families of the island, who thus desired to preserve the memory of the protection granted to him by his god Melkart, the Poseidon Larnakios. This inscription indi-

cates the existence of a new local era, the era of Lapithos, which begins, according to Mr. Berger, in 308 B. c.—Revue Arch., 1894, I, 107; Chron. des Arts, 1893, No. 36.

HATHORIC VASES.—M. Collignon communicated to the Soc. des Antiquaires some fragments of Cypriote vases in the Museum of the Louvre representing the head of the goddess Hathor. They prove that the female head on a vase in the British Museum, supposed by Prof. Ramsay (Journ. Hell. St. 1882) to come from Phocaea, is a Hathoric head, and that the vase itself is probably of Cypriote manufacture.—Bull. Soc. des Antiquaires, 1893, p. 83.

KRETE.

RECENT INVESTIGATIONS.—Dr. Halbherr is at present in Krete, but it is premature to give an account of his investigations. Mr. Myers and two Italian archæologists are also exploring different parts of the island—of this more anon.

PREHISTORIC DISCOVERIES.—We quote the following from the Athens correspondent of the Times: "Some interesting discoveries have just been made in Central Crete by Mr. Arthur Evans. The sites of two hitherto unknown primeval cities have been found, one with an acropolis and a votive grotto containing Mycenæan idols; the other at Goulas, with stupendous ruins... also with an acropolis and the remains of a primitive palace. Traces were also discovered of the Mycenæan system of writing, which seems to have been closely parallel with the Hittite and pictographic systems. Another system, apparently alphabetic, has been discovered, approaching more nearly to the Cypriote syllabary, the objects being reduced to linear forms."—Acad., May 5. [It is very probable that the ruins here referred to are those already known, and that the discoveries are really confined to the domain of epigraphy.—Ed.]

KAMARAIS.—A hoard of Mycenean vases has been found in a grotto near Kamarais on Mount Ida. They resemble some vases of the island of Thera, and especially some lately found in Egypt. Mr. Myers has visited the locality in company with the president of the Greek Syllogos of Candia, and has copied the vases with a view to writing on the subject.—Athen., Dec. 16.

EUROPE.

GREECE.

REPORTS ON ARCHÆOLOGICAL DISCOVERIES AND INVESTIGATIONS IN GREECE.—The idea of giving a synopsis of archæological discoveries

and investigations, of which our Journal has been so zealous a propagator, and, one might almost say, a pioneer, is becoming every year more popular. This is especially the case in the field of Greek antiquities. M. Reinach not only continues his invaluable and detailed Chronique d'Orient in the Revue Archéologique, but has occasional reports of a slightly different character in the Gazette des Beaux Arts, Chronique des Arts, etc. Very full reports on Greece are now being published in the Bulletin de Correspondance Hellénique, and some space is devoted to News in the Journal of Hellenic Studies, the Classical Review and in the Jahrbuch d. deut. archäol. Instituts, and even in such reviews as the Revue de l'histoire des Religions. We refer our readers to these sources. In the Bulletin they will find especial attention given to epigraphy, and in the Jahrbuch great stress is laid upon additions to museums.

DAMAGE BY THE EARTHQUAKES.—It is hardly possible to report on the damage done to monuments in Greece by the successive earthquakes this spring. The damage was very general throughout the north-east. In Athens a large block fell from the Gate of Hadrian and a capital from the gate of Athena Archegetis, damage was done to the monument of Philopappus and to several columns and to the epistyle of the Parthenon. In Livadia the medieval tower, in Calchis part of the fort, the Turkish mosque and the tower of the Church of the Holy Preparation fell down.

The commission of engineers and architects appointed to inspect the ancient remains after the earthquake is of opinion that various parts of the Parthenon must be strengthened by iron clamps. A definite resolution has not yet been adopted. Still more serious is the damage done to three well-known monuments of the Middle Ages: the Monastery of Skripu on the site of the ancient Orchomenos; that of Daphni, near Athens; and that of St. Luke at Livadia. The injuries at the last named are principally centered on the structure, those of the Daphni Monastery in the mosaics. When the ancient church of this monastery was damaged, not very long ago, by an earthquake, the Greek Government determined to restore it, and Signor Novo, of Venice, has devoted a couple of years to it. After pulling down the old cupola and erecting a new one of the same dimensions he replaced upon it the old mosaics which had been taken to pieces, and he performed the same operation for the mosaics on the walls of the body of the church. The work was already half completed when the earthquakes began. The church, indeed, has suffered little, thanks to the fact that its walls had been secured last year by the insertion of triangular bands of iron; but the shattering of the cells which are built above the church shows that even the church itself would suffer seriously from a continuance of the shocks. So it has been determined to remove to the Central Museum at Athens such of the ancient mosaics as the Italian workmen have not yet replaced on the walls of the church. Even with regard to the mosaics already restored to their old positions, some further step will probably be taken, as the committee has expressed the opinion that, owing to its faulty construction, the church cannot, in spite of the bands of iron, be kept intact for more than half a century.—Athenæum, May 19.

HERAKLES AND PELIAS.—" Herakles at the funeral games of Pelias on the chest of Kypselos" is discussed by F. Studniczka in the Jahrbuch d. Inst., 1894, pp. 51–54. In opposition to Pernice (Jahrb., 1888, p. 365 f.) it is shown that Herakles belongs to the representation of the funeral games, and that he is supposed to have his place at the turning post of the race course, like Phoinix at the funeral of Patroklos,

Il. xxIII, 359 sq.

LAOCOON-MONUMENTS.—In the Jahrbuch d. Inst., 1894, pp. 43-50, R. Förster discusses Two more Laocoon-Monuments (3 cuts). The first is a fragment of a vase of so-called Samian ware, found in 1866 at Cirencester. The little relief is somewhat damaged. A muscular man, in a posture recalling that of the Laocoon, is struggling with two snakes. Beside him is a small figure, perhaps a son of Laocoon, perhaps (if winged, which is uncertain) an Eros with reference to the love of Laokoon for Antiope. The second monument is an impression of a seal on a deed in possession of Lord Arundel at Wardour Castle. The deed is dated 1529, and the seal is that of Thomas Colyns, prior of Tywardreth in Cornwall. It was first published by C. W. King in the Archaelogical Journal (London, 1867) xxiv, p. 45-54. King believed it to be a work of the best period of Greek gem-engraving. Förster shows that it is modern, and of no use for the restoration of the Laocoon group. A gold plaquette in the museum at Berlin is published.

A MYCENEAN BULL-FRIEZE.—This is the title of an article by F. Hauser in the Jahrbuch d. Inst., 1894, pp. 54–56 (cut). The fragment in the British Museum (Catalogue, by A. H. Smith I, No. 5, Perrot et Chipiez, Hist. de l'Art, vi, p. 646) is republished and interpreted not as a lion but as a bull, and shown to resemble the bulls of the Vaphio cups. The fragment probably came from Mykenae, and adds probability to the view that the Vaphio cups and the bull of Tiryns are the work of native artists.

NIKAGORAS, A RHODIAN STRATEGOS.—On a stone, the form of which indicates that it was the base for a sepulchral monument, has been

recovered the inscription wrongly read by Biliotti and Cottret, L'isle de Rhodes, 1881. The inscription reads

Νικαγόρας Παμφιλίδα [καθ] ὑοθεσίαν δὲ Νικαγόρα Λαδάρμιος.

We learn from this that Nikagoras came from a deme in the inner mountain region of Rhodes, known to-day as Aláerma. Hence Peraia where the Karpathians erected a monument to him was not his native place.—F. HILLER VON GAERTRINGEN, in *Arch. Epig. Mitth. aus Oestr. Ungarn*, 1893, Heft 2.

TLESON AND ERGOTELES.—Amongst some vases in the possession of a Florentine dealer in antiquities is a cup in which signatures of Tleson and Ergoteles have been ignorantly combined by the discoverer or some later hand. To the 36 signed works by Tleson listed by Klein M. S., pp. 73–75, others may be added which, with the present, brings the number up to 41, showing him in productivity standing next to Nikosthenes. This is the second signature known of Ergoteles.—Ludwig Pollak, in Arch. Epigr. Mitth. aus Oestr. Ungarn, 1893, Heft 2.

PHEIDON KING OF ARGOS AND EARLY GREEK HISTORY.—In an article published in the Revue Numismatique (1894, I,) entitled La date de Pheidon, M. Theodore Reinach says: "Pheidon, king of Argos, is the first really tangible individual in Greek history; hence the serious importance of determining his date and the endless discussions that have arisen in regard to it. At present, as among the ancients, there reigns a perfect anarchy of opinions, and the dates assigned to the ἀκμή or climax of the reign of the Argive King vary from the beginning of the IX century to the year 580-a variation of three full centuries. As the name of Pheidon is connected with the history of the introduction of coinage in Greece, numismatists have often based themselves on the presumed date of his reign to draw conclusions in regard to that of this great reform. This is, in my opinion, a false method of reasoning: for, on the contrary, it is from the positive data of numismatics that we must derive assistance in making a choice among the divergent indications of ancient and modern historians."

It may be granted, with Herodotus, that the Peloponnesian cubic measures owed their institution to Pheidon, and that to him also, as Pliny and Ephoros say, is due the system of weights. On the contrary, that he coined the first money, in the Æginetan mint, a fact stated by Ephoros and Aristotle, is manifestly false. One item in Aristotle's statement is, however of considerable interest. He states that Pheidon consecrated in the Heraion of Argos iron δβελίσκοι or spits, which were the medium of exchange before the introduction of coin-

age. But when Aristotle adds that this gift of Pheidon was destined to commemorate the abolition of the old iron currency, it is impossible to agree with his explanation. Rather, it must be supposed that the όβελίσκοι were placed in the temple with the practical object of preserving the regular legal standards ne varietur of a system then in vigor and expected to remain so. Such a custom is well attested, in other cases, at Athens, Delos, Labadeia, &c. The conclusion is that Pheidon far from abolishing the ¿βελίσκοι really introduced and regulated them. This simple fact places him far back of the period now commonly preferred—the VII or VI centuries. For it should be remembered that electrum coinage was invented by the Lydians toward the middle of the VII century. Shortly after the Æginetans commenced their coinage, first of electrum and then of silver. Now the Æginetan silver coinage follows the Peloponnesian, that is, the Pheidonian ponderal system. Hence, this system must have had, before 650, the time to spread not only throughout the Peloponnesus but to Aegina: furthermore, it ruled at Athens in the time of Solon (595 B. c.). Certainly a century would be short enough for such a propagation of the Pheidonian system. This would date its creation from the middle of the VIII century, which is precisely the date assigned to Pheidon by the famous text of Pausanias, according to which he celebrated, in concert with the Pisatoi, the eighth Olympiad (748 B. c.), and this text, thus confirmed by Aristotle, furnished the long-sought corner-stone of early Greek history.

ARGOS.—This Spring's Excavations at the Heraion.—Mr. Robinson, Curator of the Boston Museum, happened to stay at Argos at the time of the close of this spring's excavations under Dr. Waldstein, and in a letter to the Nation (May 31) dated Athens, May 4, he describes the results quite fully and we will quote his words. "I had the good fortune to spend three days there [at the Heraion] just before the close of this season's work, and am sure that any member of the Archaeological Institute of America would have felt as well pleased as I did at the manner in which the Institute's appropriation has been expended, not only as regards the value of the discoveries, but in the careful and intelligent handling of the soil, with a view to noting every bit of evidence it afforded on questions which might arise.

"The site of the Heraion is literally one of the most commanding that could be thought of for a temple. No one who has crossed the plain of Argos can ever forget the beauty of that country. More level than Attica, its appearance is also more restful. There is hardly a mound to break its surface until one reaches the foot-hills of the mountains which surround it, except where the sea makes its crescent on the

south. The long, sweeping curve of its slope is broken near the base by a small crest or ridge, into which it rises just before it joins the plain, and this crest was chosen as the site for the temple of Hera.

"The original temple was placed not upon the summit of this crest, but upon the upper part of the southern slope, where a platform or terrace was constructed for it, and here it must have formed a conspicuous object from every quarter of the plain. The only unquestionable remnant on the site is a portion of one low wall, on the top of which the circles traced in the stone to indicate the size and position of several of the columns are still clearly visible. This bit of wall is much more primitive than those of the Olympian Heraion, and bespeaks a decidedly earlier date for this temple, which may therefore be the oldest Greek temple that we know. The pavement of the platform is in remarkably good preservation. Above it, and separated by a thin layer of earth, was a concrete flooring, several patches of which are left. The excavation of the later terrace is a remarkably clean piece of work, and reflects great credit on those who had to do with it. Every answer which the place still had to give as to the character and details of the new temple and its immediate surroundings, the student finds here, readily at hand. What actually remains in situ is the walls of the foundations, several courses high, including those of the peripteros and the interior, and that of the steps or incline by which the temple These foundation walls are not preserved up to the was entered. level of the floor; and from the manner in which they were left it is evident that they-and probably other portions of the temple-were not destroyed by nature or by violence, but carried away, block by block. There is reason to believe, therefore, that the careful examination, by an architect, of the towns in the plain might result in the discovery of important members built into mediaval or later structures. On and near the terrace are sufficient fragments to give the general indications of the proportions and style of the temple, though here again it is surprising that there are not more. I believe that only three fragments of capitals have been unearthed, and scarcely any of the columns themselves. On the other hand, a number of blocks of the upper members have been found and these show that both the triglyphs and the background of the pediments were of black marble.

"The retaining wall which separated the terrace of the later temple from that above it, formed the back of a long stoa or portico, in front of which votive statues and stelai were erected. The bases and grooves showing where these stood are numerous, but, beyond a few inscription.

tions, nothing of the works themselves remains.

"Below the new temple is a fourth terrace, which seems to have been occupied for the greater part, if not the whole, of its length by another portico, only a portion of which has yet been uncovered. The greater part of the working force has been concentrated upon this site during the present season, partly because it seems to have been one of the principal buildings of the sanctuary, and might be expected to contain inscriptions or other monuments of importance, and partly because Dr. Waldstein hoped that in the enormous mass of earth under which its remains are buried he might find sculptures or other valuable objects, thrown over from the terrace of the temple. Some fragments of metopes have already been found here, and quantities of terracotta fragments. But not more than half of the portico had been uncovered when the work had to be brought to a close, and we cannot say what may yet be waiting to be brought to light.

"I have spoken of only the most important buildings which have thus far been unearthed, but there are others, partially disclosed this year, which promise to be no less interesting, some of them being undoubtedly within the sacred enclosure, and therefore directly connected with the sanctuary. As the plans of these are more or less complicated, a description would be confusing without the aid of diagrams, and for these we must wait until new drawings of the site have been prepared. From this slight account, however, it will be seen that the architectural discoveries are not the least important that have been made here. They are in fact much more extensive than I had expected to find them, and well deserve to be carefully worked up.

"Of the sculptures, the now famous Hera head still remains the most beautiful and the most interesting. Of this and the other fragments, which are now familiar in America through casts and photographs, I need not speak. This year, besides the fragments found on the lowest terrace, several have been brought to light elsewhere, among them the head of a youth, which bears a close resemblance to the female head found by Rangabé on this site. This year, as before, the fragments of decorated pottery discovered are almost countless. Combined they form one of the most remarkable finds of this nature ever made in Greece. By far the larger part are of the early styles, Mykenæan, Dipylon, and, most of all, the so-called "proto-Corinthian," upon the history of which they bid fair to throw new light. The labor of classifying these will be long and trying, but it will give our School one of the best opportunities that could have been desired for publishing new and valuable material.

Domical Tombs.—"Speaking of pottery, I cannot pass over a most interesting discovery which took place while I was at the excavation—

that of a "bee-hive" tomb of the Mykenai type, which apparently had never been opened since the last body was placed in it. The tomb was roughly hewn in the soft rock, and, the top having fallen in, the vault or chamber is filled to the surface with a solid mass of earth. Gradually its concave walls show themselves, and then the two or three men who can work inside the hole proceed, as carefully as their impatience will allow, to clear the interior down to the level where they may expect to find something. After two days the tomb and its dromos, or entrance-passage, had been cleared out. The tomb measured about ten feet in diameter and the same in height. It contained no less than fifty-two specimens of prehistoric pottery, most of them fine examples of the Mykenai and Ialysos types, with the decorations upon them quite fresh and brilliant. Of these, forty-eight were vases, three were idols, and one was a little chair or throne for an idol, about six inches tall, and gaily painted. There was no metal of any kind.

"This tomb was about a half-mile to the north-west of the temple, near the path to Mykenai. Another was found the day following, much nearer the Heraion. It was empty, but its existence proved that the first was not an isolated grave, and probably there are many others in the neighborhood, as the workmen believe. If so, there may be still another chapter to be written on the history and worship of the old temple near which they were made. What was their relation to it?

"I hope that this and the other discoveries I have described may cause those who are interested in these matters to share the regret I felt when I heard that it was not the intention of the Managing Committee of the School to continue these excavations after this year. It was, as I know, the expectation that the work could be completed with the present season. This, in spite of prophecies, has been impossible, as an examination of the place shows. It is a safe maxim for all work of this kind that you cannot tell what is in a hole until you have dug it; and, in the present case, the more that has been dug the more there has been to dig. Aside from the question of these newlydiscovered tombs, which bid fair to be of exceptional importance, the site of the Heraion itself cannot be considered properly excavated until the line of the peribolos wall has been determined and every building or monument within it laid bare. Its entrance is still to be discovered and the approaches by which the different terraces were reached. Two hundred and fifty men have been employed this year. and an average of five members of the School have superintended the work and taken charge of the things found. This is as large a force as can be advantageously employed, yet it is my impression that more

than one season will still be necessary before the work can properly be considered as finished. It would be unfortunate if the results of these excavations were to remain unpublished, yet it would seem a waste alike of energy and money if what we are to regard as a final publication were prepared with a large part of the site still buried. Therefore, in the interest of our School, and for the sake of those who have carried on the work admirably thus far, it is earnestly to be hoped that the committee will find it possible to allow the excavations to continue until they are really completed, and then to publish the results in the manner they deserve."

Edward Robinson.

In a letter dated at the Argive Heraum, on April 6, Dr. Waldstein gives a brief account of the success which had already attended this spring's excavations of the American School of Classical Studies at Athens, at that place. He had 258 workmen engaged in removing accumulations of soil, and had already completed the excavation of the eastern end of the second temple platform. New ruins of buildings had been brought to light, besides more than a score of basketfuls of vases, bronzes, cut stones, etc. The most important discovery was that of "another metope head in perfect preservation, of the best fifth-century art." This head illustrates perfectly Polycletan art, and "reminds one of the head of the Doryphoros." Another male torso, from a metope, and a later head were among the discoveries. Much work remains to be done.—Nation, May 10.

The following note seems to indicate some discoveries shortly after Mr. Robinson's departure: "At Argos the excavations of the American School have laid bare a large marble building which is believed to be the Gymnasium, as also many tombs of the Mycenæan age."—Athen., May 19.

ATHENS.—Temple of Dionysos to Alavais the Odeion and the Bakcheion.—Dr. Dörpfeld, before bringing this season's excavations near the Pnyx and Areopagus to a close, made still another important discovery, viz., that of the site of the ancient temple of Dionysos en limnais, together with statues, reliefs and inscriptions. These last speak of the worship of the god and of his rites, and of the ceremonies attending the reception of those who wished to form part of the Sacred Society of the Iobacchi (Yi\(\delta \alpha \alpha \alpha \alpha \alpha). A large four-cornered altar bears on one side a sacrificial scene, in which may be seen a man preparing to kill a goat, while behind it stands an ox bound to an altar by the horns. On another side is seen a satyr dragging a ram by the horns, with a man standing near ready to fell it with a club, while behind is seen a maenad. A third face represents the figures of Dionysos, Pan and a satyr, while the fourth bears a short inscription.—Athen., March 24.

The Enneakrounos was described by the ancients as being near the temple of Dionysos & Λίμνως and the Odeion, and Dr. Dörpfeld has discovered the remains of a building which may well be the Odeion. All that has been found lately belongs, generally speaking, to the second or third century of our era; but amongst the sculptures there is a head of King Attalos, which is much more ancient. The largest of the inscriptions found at the same time gives us the name of a new eponymous archon called Epaphroditos.—Athen., March 24.

In the Mitth. Athen. (1894, pp. 143-151), Dr. Dörpfeld writes of his Excavations at the Enneakrounos (cf. Mitth., 1892, p. 439, sq., and 1893, p. 231, sq.). A rock cut aqueduct with pipes dating from the sixth century B. c., has been followed for about 150 metres. The Odeion mentioned by Pausanias I. 14 as near the Enneakrounos was not found, but south of the Areopagos was found a building of Roman times called Bakcheion, the assembling place of the thiasos of Iobakchoi, as is stated in an inscription. The hall was 18 x 11 metres in size, divided into three aisles by two rows of columns, and had at the eastern end an apse in which several altars and a great number of sculptures were found. An altar with dionysiac reliefs has an inscription, KOPOTROGOFARAARTEMIN. Another altar bears the name of Artemis, and a statue of the type of the Artemis of Versailles was found. These were found in a room near the apse, which is believed to be the late Roman Artemision. The Bakcheion occupied the site of the ancient precinct of Dionysos in Aimrais. Deep under the floor of the hall of the Iobakchoi a precinct about 40 x 20 metres in size has been found, surrounded by polygonal walls. In this precinct were found many fragments of large vases with black and red figures, the foundation of an altar or table of poros, and a building with a Greek wine-press. Near this ancient precinct of Dionysos is a second precinct with polygonal walls, probably that of Artemis & Aimvais (Schol. Callimach., H. to Artemis, 172). Excavations are to be renewed in the autumn.

The Pelargikon.—In the Έφημερὶs ᾿Αρχαιολογική, 1894, pp. 25–62, John Williams White writes of *The Pelargikon in the Age of Perikles*, combating the opinion expressed by Dörpfeld (*Mitth. Athen.*, 1889, p. 65, sq.) and others, that the Pelargikon existed as a fortification throughout classical times. Inscriptions and all passages of classical authors relating to the question are discussed, and the conclusion is reached that the fortification was not restored after the Persian occupation of Athens.

STATUE OF TÆNIA-BEARER.—In the Mitth. Athen. (1894, pp. 137-139), J. Ziehen publishes (cut) a Statue of a Taenia-bearer in the Peiraieus. The

marble statue was found near the custom-house at the Peiraieus. The head, left leg from above the knee, and right foot are gone. A youth is represented, carrying in his right hand a bundle of bookrolls, in his left a large alabastron. The youth is nude, save that he has thrown about his neck and shoulders at least fifteen tæniæ. The meaning of this is unknown. The statue is of Roman times.

Inscriptions.—In the Mitth. Athen. (1894, pp. 110–112), Th. Preger publishes five inscriptions from Athens. Three are in elegiac verse. Of these, two are sepulchral, the third from the basis of a portrait-statue. The fourth inscription is merely the name, etc., of Apollonides son of Menodoros, $\Delta \eta \rho \alpha \delta i \dot{\omega} \tau \eta s$. The fifth is a brief dedication by one

Lokianos to Hermes Epekoos in archaistic characters.

Bronze Tripod.—A. Brückner published in the Mitth. Athen. (1893, p. 414, pl. 14), an Athenian grave-find of the geometrical period. The object in question is a bronze tripod found near the Athenian slaughter-house southwest of the extremity of the Pnyx hill, and acquired in 1883 by the Greek Archæological Society. Each leg has herring-bone ornament. Over the upper end of each leg is a rolled double spiral, after the manner of Ionic volutes. The hoop supported by the legs is wrought à jour, the pattern being in the main a succession of S-shaped spirals. The tripod supported an urn of thin bronze 0.53m. in diameter. The tripod itself is 0.45m. high.

THE SIDON SARCOPHAGI ATHENIAN WORKS.—The Archäologischer Anzeiger, 1894, pp. 1-23 in the Jahrbuch Arch. Inst. contains an elaborate article by F. Winter on The Sarcophagi from Sidon (17 illustrations). Cf. A. J. A., 111, p. 97 sq.; 156 sq.; 431 sq. After a very complimentary introduction concerning the new museum in Constantinople and the archæological activity of Hamdy Bey, the tomb at Sidon is described with its shaft and seven chambers containing seventeen sarcophagi. This tomb is older than the adjacent tomb of Tabnit. The sarcophagi are then described in detail and discussed. The oldest are the "Lycian" sarcophagus and "sarcophagus of the Satrap," both belonging to the fifth century, B. c. The "sarcophagus of the mourning maidens" belongs approximately to the time of the mausoleum at Halikarnassos. The superb "Alexander sarcophagus" is discussed from various points of view. These beautiful sarcophagi were not originally intended for the tomb in which they were found, but were made (no doubt in Athens) for some important personages and afterwards brought to Sidon. The exact interpretation of the scenes on the Alexander sarcophagus is difficult, and the question for whom it was made remains unanswered. The illustrations are taken from Une Nécropole royale à Sidon, by Hamdy Bey and Théodore Reinach.

AMERICAN SCHOOL AT ATHENS.—At a recent meeting, in New Haven, of the managing committee of the American School of Classical Studies at Athens, Prof. J. R. Wheeler, of Burlington, Vt., was elected secretary of the committee, to succeed the late Mr. T. W. Ludlow. Prof. T. D. Goodell, of Yale, was elected Professor of the Greek Language and Literature for 1894–95, and Prof. B. I. Wheeler, of Cornell, to the same office for 1895–96. Mr. Richard Norton was elected instructor. Prof. F. B. Tarbell, of the University of Chicago, was made a member of the committee. The faculty of the school will consist of Prof. R. B. Richardson, director; Dr. Charles Waldstein, Professor of Art; Prof. Goodell, of Yale, Professor of the Greek Language and Literature; Mr. Richard Norton, instructor on Greek vases.

DELPHI.—HISTORY OF THE EXCAVATIONS BY THE FRENCH SCHOOL.—The following notes, taken almost entirely from M. Homolle's reports, will summarize from their very beginning all the stages of the French Excavations at Delphi, which have met with such wonderfully brilliant success. The notices that have hitherto appeared in the JOURNAL have been so desultory and incomplete as to make some such full statement necessary.

The French Chamber, in proposing a commercial treaty with Greece in 1890–91, included a grant of 500,000 francs for excavations at Delphi. The treaty was accepted and ratified by the Greek Chamber. The next step was to expropriate the entire village, which consisted of some thousand lots divided among over three hundred owners. This required the construction of a new village on land which had to be expropriated, divided into lots, built upon and water provided. The estimate was concluded in December 1891.

The French School installed a superintendent in June, 1892: between July and December it constructed a Decauville railroad to carry away the rubbish. All preliminaries having been concluded and the first payments made on October 7, MM. Homolle and Couve proceeded to Delphi on that day and work was opened Oct. 10. A conflict soon arose with the inhabitants, who opposed all work until the complete payment of indemnities. The work-yard was invaded, the workmen dispersed, as they had been before at the time of the laying of the railroad, and excavations could be resumed only with armed protection.

The discoveries made in the first campaign, during the autumn and winter of 1892-93, may be summarized as follows:

Earliest discoveries, 1892-3.—Topography.—A new section of the Sacred Way was uncovered, connected with that discovered by M. Haussoullier. It descends in curved line, passing under a house. To the right

the basement of the semi-circular monument in breccia and marble, where fragments partly covered with inscriptions lay on or in the ground. Between it and another ancient basement is a wall of later period.

Architecture.—Beside these basements several architectural pieces were found: enough of the semi-circular monuments to reconstruct it almost entirely; drums of doric columns and cut stone of tufa, from the temple of Apollon; marble shafts of doric columns of fine execution; and Ionic capital of the IV century; the entablature of an Ionic or Corinthian building of about the same period, of fine work; pieces of mouldings, cornices, gutters, a lion-head gargoyle, painted architectural terracottas.

Sculpture.—Fragment of a figure in the style of the xoana, apparently seated. Archaic female statue, draped; female face of archaic style. Several fragments of statues or bas-reliefs. A Roman bust. Fragments of a bas-relief representing a female torso of elegant style.

Various Objects.—A small bronze bracelet,—a small votive bronze helmet,—some Greek, Roman and Byzantine bronze and silver coins, an axe and stone hammer, a terracotta statuette and some fragments of painted vases,—an inscribed amphora handle.

Epigraphy.—About sixty inscriptions were found: the majority belong to the Alexandrine and Roman periods, a few are anterior to the IV century, and a few contemporary with the Roman empire. There are: acts of manumission; dedications, decrees of the city of Delphi, catalogues; accounts; an oracle; the regulations of a γένος; letters from foreign cities, emperors or Roman magistrates—one of which is in latin.

Among the more interesting texts are: (1) a metrical inscription relating to the miraculous birth of a long-awaited child, who came forth after a sacrifice to the god and in conformity with an oracle. The account and circumstances remind of the cure-steles of Epidauros. (2) Decrees in favor of a χοροψαλτρία from Kymé, of Q. Fufius Calenus, of a χορούλης, unopposed victor, who had out of gratitude, executed a piece of the Βάκχαι of Euripides, &c. (3) A latin inscription regarding work required in the territory of Delphi in consequence of inundations. (4) a στοιχηδόν inscription in fine characters of the fifth century containing a series of decrees of the γένος, of the Λαβνάδαι. The regulations concern the admission of children into the γένος, marriage, religious obligations, and funeral ceremonies of the members. Careful provision is made for the role of each magistrate, the procedure, the fines; the oath has here, as in all early and religious legislation, a very important place.

DISCOVERIES IN THE SPRING OF 1893.—The excavations lasted from May 1 to November 15, no work being done in August and September. The surface explored was increased more than ten-fold. The plan drawn up by M. Tournaire, the architect of the excavations, embraces a space of about 150 by 80 metres, comprising: (1) the entire sloping region traversed by the Sacred Way from the Treasury of the Athenians to the point where, after a long curve, it reaches the summit of the Pelasgic wall, in front of the E facade of the temple of Apollon; (2) the terrace that sustains the temple; (3) the temple itself, which is already more than half cleared.

Treasury of the Athenians.—This name given hypothetically to the structure discovered in May was confirmed by direct proof; by Athenian decrees cut on the walls and containing mention of the θησανρὸς τῆς πόλεως "treasury of the city (of Athens)," and of the οἶκος 'Αθηναίων; fragments of the dedication of the monument cut in a step, containing the words ΑΘΕΝΑΙ.. ΜΑΡΑΘ.. [it is known that the structure was in commemoration of and erected with the spoils of the battle of Marathon]. The structure—the remains of which are so numerous as almost to make a reconstruction possible—rested on a terrace accessible on the east side and was protected in the rear by a retaining wall built in alternating regular courses and polygonal masonry. It measures about 10 by 6 metres, has the form of a temple in antes, of Doric style, and reminds, especially in the outline of its capitals, of the temples of Aigina and Olympia.

The metopes, more or less completely reconstituted, number at least sixteen. The scenes identified belong to the legend of Herakles and perhaps to that of Theseus—a combination seen in the "Theseion" at Athens. The hero in these contests is struggling sometimes with men, sometimes with animals; he bears at times the lion skin and quiver, symbols of Herakles, at times a helmet and buckler, less characteristic symbols, which might also belong to Theseus. The following scenes may be cited: the contest with Geryon, covering two and perhaps three metopes, one representing the triple warrior, a second the oxen, and a third the dog Orthros; contest with a wounded amazon; with an overthrown centaur; with the lion of Nemea, who is being suffocated; with the Cretan or Marathonian bull; victory of Herakles over a vanished enemy; his meeting with Athena. Then came a series of unexplained or incomplete scenes, combats, series of animals, &c.

Inscriptions of the Treasury.—One of the steps was inscribed with the dedication. The walls, from the orthostatai to the architraves, were covered with inscriptions, Attic in great part, or relating to Athe-

nians. The arrangement of the courses has been reconstructed by the help of the inscriptions: the antae have been put together from bottom to top and thus give the exact height of the monument. The inscriptions belong to the following categories. (1) Decrees of the Athenian people, of the Marathonian tetrapolis, Delphic decrees in favor of Athenians and a few strangers. (2) Decrees of the Amphiktyons or of the Delphians in favor of Teos (right of asylum). (3) Brief of a dispute between the association of the τεχνίται of Athens and the corporation of Thebes, which was carried in turn before the synod of the Isthmus and of Nemea, before the Amphiktyons, and finally before the Roman magistrates and senate. (4) Catalogues of individuals sent from Athens to Delphi for the celebration of the Pythia (ephebes, priests, theori, pytheasts, etc.)—very important for the study of the attic yén and the feasts of Delphi. (5) Inscriptions in honor of individuals, mostly Athenians, who had received Delphic citizenship. (6) Musical fragments, in which the poetry is surmounted by signs of vocal or instrumental notation [these will be treated separately below]. The sustaining wall in calcareous stone, placed behind the Treasury is itself covered with inscriptions,-decrees of proxeny and manumission. Finally, tall white marble cippi, whose four faces bear decrees of proxeny and a pæan were found on the terrace. Copies of all the inscriptions have been made by MM. Couve and Bourguet.

Further Discoveries.—The Treasury is surrounded by three tufa structures-one above and two below it. Here must have been the Treasury of the Boiotians, and here, in fact, have been found the dedicatory inscriptions of several offerings consecrated by Boiotians, or executed by Boiotian artists. Along the sustaining wall, still standing, but with broken feet, was an archaic Apollon, over two metres in height, sculptured, as a broken inscription on the base informs us, by a certain ... μεδες, of Argos. It is a monument of capital importance for the history of Peloponnesian sculpture. A few steps above the temple, along the Sacred Way, were two inscriptions of the fourth century, contemporary with the Sacred War: one contains the accounts of the years 353-342; the other the list of payments made by the Phokidians, in consequence of fines imposed upon them. A considerable space void of monuments extends both on the left of the Sacred Way, between the Treasury and the Portico of the Athenians, and on the right, opposite this Portico. The first site, covered with rocks, may be identified with the sanctuary of Gê and the Muses, where doubtless was the stone whence the Sibyl prophesied, and the rock, seat of the primitive oracle near which Python perished. The

second site, uncovered, of circular form, surrounded by benches, may be regarded as the āλως.

At this point at the end of the Portico of the Athenians and the east corner of the Pelasgic wall the road runs parallel to the walk with rapid ascent. At this elbow a straight staircase came in which perhaps was continued below, toward the entrance to the sanctuary, giving a straight approach. The upper part of the road is bordered, on the right side, by a continuous close line of monuments, as being the spot nearest the temple and the most prized. Pausanias enumerates here a large number of structures, and among the basements there doubtless is that of the Treasury of the Corinthians. No inscriptions have been found to help identification, except one, which appears to be in situ and as it bears the letters TAPANTI it probably bore the offering made by the Tarentines after the defeat of the Peucetians. (Paus. x, 13, 10.)

On the opposite side, where the road joins the level of the front esplanade of the temple, about in front of the temple's axis, is a large mass of bluish calcareous stone and marble. Its lower step still bears an inscription commemorating the concession to the Chians of the προμαντεία: the cornice preserves the dedication by them to Apollon. This is the βωμός described by Herodotos (II, 135) as existing at this place. Near by is the base that bore the trophies of Paulus Æmilius, still with its magnificent Latin dedication. Just above was a monument consecrated by Charixenos, praetor of the Aitolians, of which the architrave and cornice have been found. Near by was a column of quite a new type, imitating the stem of the silphium, which indicated the Treasury of the Cyreneans (Paus. x, 13, 7). Some fragments of inscriptions indicate other monuments mentioned by Pausanias, but of uncertain site, such as the Treasury of Siphnos, below the offering of the Liparii, for a victory over the Tyrrhenians-both near that of the Athenians; the ex-voto of the Argives, etc.

The Temple.—The Pelasgic wall, whose eastern and western angles are cleared, supports the terrace upon which the temple rests. M. Homolle defers the description of the temple until the completion of the excavations. He calls attention, however, to an aqueduct which ends far underneath the basement of the temple and appears to be the ἀναπνοὴ τοῦ νάματος mentioned by Plutarch. Several hundred inscriptions have been unearthed from different parts of the sanctuary. They fall into the following classes: (1) Decrees of the Amphiktyons or Delphians; (2) Decrees and letters of foreign cities; (3) Letters of kings, magistrates or emperors; (4) Accounts of the temple; (5) Brief of documents relating to the limits of the sacred domain; (6)

artists' signatures; (7) catalogues. Sculptures have been less abundant. The sphinx, of which M. Foucart had seen two fragments has been substantially completed—its head being like that of a colossal Apollon. It was placed on the summit of the column of the Naxians, of which the drum and the capital have been formed.

M. Homolle has been authorized by the French Minister of Public Instruction to commence during this year the preliminary publica-

tion of the results of the excavations.

EXCAVATIONS IN THE SPRING OF 1894.—At the sitting of the Académie des Inscriptions on May 11, the secretary read M. Homolle's official report, dated April 25, on the excavations carried on at Delphi this spring, of which an almost complete translation is here given.

Excavations were again started on March 27. The program for this year was: (1) To finish the clearing of the temple of Apollon and begin that of the region above it containing the theatre and the famous Leschê of the Knidians decorated with paintings by Polygnotos; (2) To clear all the ground within the sacred enclosure, from the Treasury of the Athenians to the eastern entrance of the sanctuary, and as far as the encircling wall itself on its east, south and west sides; (3) To excavate the space comprised between the southern encircling wall called *Hellenico* and the road, in order to gather up any pieces of sculpture or architecture that might have been cast over it.

In each of these cases the object to be attained was clear and definite and the choice of the sites justified both by Pausanias and by hypotheses based on the rapid fall of the ground. The objects that were especially looked for were the metopes and gables of the temple of Apollon, described by Euripides and Pausanias: the completing pieces of the Treasury of the Athenians, all of which must still exist; the rest of the metopes, which will make it possible to join all the fragments together; the remains of the inscriptions which covered this structure, among which may be the remaining portions of the hymn to Apollon. In the lower part of the sanctuary may be found the bases of the numerous ex-votos placed along the sacred way—perhaps the ex-votos themselves—everything in fact, that may have come down the slope from above.

The best and most important discoveries thus far this season have been made between the Treasury of the Athenians and the *Hellenico* at the very foot of this wall. Above the wall, near the southwest corner of the sanctuary, a trifle below and to the west of the Treasury of the Athenians, there remain the foundations of the Treasury of the Boiotians. This was consecrated in memory of the battle of Leuktra, was built of greyish blue calcareous stone and covered with

inscriptions. Many of these have come to light; decrees of prexeny in favor of individuals—Thebans for the greater part—though the longest is a boundary regulation.

Epigraphic documents continue to abound, over a hundred having been found since the last campaign. Among these is a signature of the artist Theopropos of Aigina, valuable both as a historic document and because cited by Pausanias; two plaques of accounts of the fourth century; a letter of the Roman senate to the inhabitants of Delphi, who had been the victims of violence at the hand of certain neighbours, a letter which is a fine page of political literature; dedications, decrees in honor of benefactors of Delphi, and especially in favor of the athletes, musicians and poets who had gained prizes in the contests, etc.

As the lower strata of the soil are reached, a yellow or black earth so compact as to have the consistency and aspect of undisturbed soil, great numbers of fragments of terracottas and bronzes are found. These appear under the same conditions at each of the points under excavation, but especially before the west front of the temple.

The terracotta fragments—for up to the present very few even small objects have been found entire—are divided among the Mykenæan, geometric, proto-corinthian and corinthian styles. The geometric pieces present contain details worthy of study. M. Perdrizet has studied them with care and noted exactly the superposition of the various types in the layers of earth. The interesting results of his observations will be communicated later.

The bronzes belong in the majority of cases to the category of sacred utensils, such as tripods, cauldrons, cups, vases, etc., and the excessive humidity of the soil has usually much oxydized and damaged them. One piece has been found in perfect preservation and with fine patina; it is a bird with human head in the oriental style, like those found near lake Van, at Olympia, and Mt. Ptoos: no more complete and beautiful specimen of the type exists. Other pieces of this class of bronzes are: a similar bird, less well preserved; a lion of Assyrian type; three griffin heads, such as decorated tripods; two small horses, and another small animal, a dog or a wolf. One of the griffins equals the finest found at Olympia. The human figure is represented by several statuettes. The earliest is a very primitive piece, recalling the flat terracotta maquettes and the Dipylon type of face: another belongs to the series of archaic "Apollos:" an Athena much oxydised, is a delicate work of the fourth or close of the fifth century.

The clearing which is at present being carried on of the hypogeums of the temple and that soon to be undertaken of the terrace of the temple up to the very foot of the Pelasgic wall, will doubtless furnish many very primitive terracottas and bronzes.

It is yet too early to report on the plan and arrangement of the upper and subterranean parts of the temple, for the clearing is as yet

not sufficiently advanced.

The most important discoveries of the last few weeks belong to the domain of sculpture, justifying the confidence felt against quite a general scepticism. The discovery of the metopes of the Treasury of the Athenians was an archeological event. These exquisite works of the Attic school, exactly dated as they are (c. 480 B. c.), fill a vacancy in the history of Greek art. Their intrinsic value, the comparisons they suggest, the conclusions they justify, make of them a work of the first rank. They compose a group which for vigor and grace of execution, for both artistic and scientific importance, is comparable to the groups of Olympia and the Athenian Akropolis.

This discovery is now supplemented by that of the caryatidae and of a frieze which appears to be that of the temple of Apollon itself. These new sculptures are between twenty and thirty years older than those of the Treasury; they proceed from Attic workshops and they lengthen this most interesting archaic period whose history is now being reconstructed in great part for the first time. For it is the period when archaism was throwing off its last bonds, and when the artists, masters of the technique of their art, were seeking for that

ideal of beauty attained by Pheidias.

Archaic Caryatidae,-Three weeks ago there was found at the foot of the Hellenic wall a female head about half a metre in height. It was an archaic work, but charmingly graceful and of youthful beauty. The hair was in long crimped and undulating bands crowned and intersected by double lines of adjusted curls, then came a diadem with metallic ornaments, above which was a sort of tiara or polos resting on an elegant crown of ogees. Observing the remains of the polos I discovered the traces of feet, and concluded that it must have been decorated with a circular frieze of figures. I then remembered a small colonnette with such a decoration found last year in the ruins of a house (see Müller in the Denkmüler): it was found to fit exactly on the newly discovered head which was thus proved to belong to the statue of a caryatid. On the same day a second head of equal dimensions was found, still having its polos intact. Though of a somewhat more severe and dry style, it is evidently a work of the same time and for the same purpose as the first, and belonging to the same monument. Compared to the statues of the Akropolis they will be seen

to be among the most highly finished, serene and perfect, with a smile that has something grave and melancholy.

This led to a further discovery. When I went to Delphi in 1891 to settle on the limits of the excavations, I had seen in a garden, on the very site where these two heads were now discovered, the body of a colossal female statue of the type of the Akropolis figures. The style and the arrangement of the hair corresponded exactly to those of the first head, which was found to belong to it. As several fragments had already been adjusted to this torso in the museum, the statue was almost complete. Here then, at the close of the sixth century, is a caryatid executed by Attic artists, a first attempt, a prototype of the Korai of the porch of the Erechtheion. To what building did they belong? Certainly to a large edifice of the sixth century, but whether or no to the temple of Apollon itself will be left to the excavations to decide. It should merely be noted in the meantime that the subjects figured on the polos of the two figures,—a Bacchic seene and an Apolline scene,—correspond to the two aspects of the Delphic cult, and to the two compositions that decorated the gables of the temple.

Archaic Sculptured Frieze.—In the same manner as Delphi gives us the model of the Caryatidae of the Erechtheion, she seems to furnish also a first sketch of the Parthenon frieze. There had long existed in the museum an archaic bas-relief which although already published, seems not to have been appreciated at its true value. It represents a quadriga advancing to the right toward an altar. Fifteen days ago was found a fragment of a relief of the same size and style, representing a rape—a man carrying away a woman in his arms and in the act of entering his chariot. The inference immediately suggested by this discovery was that both pieces belonged to one group—and this a frieze. This idea was justified on the same day by the discovery of another fragment on which a horseman is represented mounting, while he holds a second horse. This slab is shown to have been preceded and followed by others on account of the amorces of both right and left slabs still remaining.

Of this frieze, on which a procession of chariots and horsemen was represented, Pausanias says not a word, any more than of the sculptures of the Treasury of the Athenians. It is about .65 m. high and might well suit this temple, which is a little smaller than the Parthenon. If, now, it is really the temple of the Delphian Apollon which is represented, with a certain fantastic liberty, on a new Attic bas-relief in Rome, it would be demonstrated that this is the temple frieze. This is, however, as yet but a hypothesis.

Since these discoveries other slabs of the frieze have been found, almost day by day. One, of which a photograph is sent, represents a group of three seated goddesses, one of whom is Athena; they are conversing and appear to show to each other with curiosity some spectacle in which they are taking a lively interest. This is a piece of careful (serrée) execution, and graceful design, and the naive gesture by which the last of the three goddesses attracts the attention of her neighbor by touching her under the chin has something especially charming. Few archaic sculptures are as sympathetic.

If the frieze belongs to the temple, it might be attributed to the school of Kalamis: but it involves difficult questions, requiring long study. One fact appears to be certain: it is that this composition is the same as that of the Parthenon frieze: procession of chariots, procession of horsemen, assemblage of gods. In the existence of these two prototypes of Athens at Delphi—caryatidae and frieze—we have a new example of the permanence of traditions and types which is one

of the strong characteristics of Greek art.

A further series of photographs, to be forwarded shortly, will exhibit the six reliefs of the frieze that have been found at the close of last week and in the course of the present, and will also exhibit a gable composed of eight figures of divinities and two horses, representing the Contest for the Tripod. We already have about twelve metres

of the frieze, including two corner pieces.

Philip of Macedon at Delphi.—One of the inscriptions containing accounts is especially interesting. The funds were administered by an international council of magistrates called ναοποιοί. When complete the council had 36 members: three members alternating every month exercised the presidency with the title of προστάται or ἐπιμήνιοι. The irregularities of meetings and in the number of magistrates shows this inscription to belong to troubled times, and, in fact, a war is mentioned in it. This must be the Sacred war, for the following reasons: (1) The Phokidians are at first mentioned among the peoples whose ναοποιοί sit on the council; then, they disappear in the very year that peace is signed: (2) The Macedonians appear on the council in this very year and one of their ναοποιοί is named Philip, undoubtedly the Macedonian king, for the rest are called, without name οι παρά Φιλίππου. It follows that the inscription dates from 346 B. c. when the treaty was concluded by which the Macedonians were substituted for the Phokidians on the Council of Amphiktyons, and when Philip must have visited Delphi.

Pxan of Aristonoos.—On a stele found in the Treasury of the Athenians is inscribed, in characters of one of the three centuries B. C., a

pæan to the Pythian Apollon, preceded by an honorary decree in favor of the poet. It forms the subject of a short paper by Henri Weil in the Bull. de corr. hellén., 1893, pp. 561-68.

The pæan consists of twelve similar couplets, ending alternately in the formulas ἐἡῖϵ Παιάν and 迄 ϵῖ Παιάν. The sense is complete at the close of each pair of couplets, as follows: I. The son of Zeus and Leto occupies the sanctuary of Delphi by the will of the immortals. II. Since he inhabits the sacred grotto pure and holy oracles and decrees proceed from the subterranean places until then ever terror-giving. III. Purified in Tempe (from the slaughter of the serpent Python), brought back by Pallas, in harmony with Gaia and Themis (its previous occupants), the god takes final possession of the temple. IV. Apollon's gratitude to Pallas: he gives her the place of honor. V. Other gods, Poseidon, the nymphs, Dionysos, Artemis, gather about Apollon. VI. May the god receive our songs and protect us.

The metre is the Glyconian strophe as found in Anakreon and Catullus. The poet's name is Aristonoos, son of Nikosthenes, of Corinth. The following is the entire text.

Δελφοὶ ἔδωκαν 'Αριστονό[ωι, ἐπεὶ]
τοὺς ὕμνους τοῖς θεοῖς ἐπ[οί μσεν],
αἰτῶι καὶ ἐκγόνοις προξενίαν,
εὐεργεσίαν, προμιυτείαν, προ[εδρίαν],
προδικίαν, ἀσυλίαν πολέμου ἢ εἰ—
ρήνης, ἀτέλειαν πάντων καὶ ἐπιτι—
[μία]ν καθάπερ Δελφοῖς, ἄρχοντος
Δαμοχάρεος, βουλευόντων
'Αντάνδρου, 'Ερασίππου, Εὐαρχίδα.

'Αριστόνους Νικοσθένους Κορίνθιος 'Απόλλωνι Πυθίωι τὸν ὕμνον.

I.

Πυθίαν ໂερόκτιτον ναίων Δελφίδ' ἀμφὶ πέτραν ἀεὶ θεσπιόμαντιν ἔ δραν, ἰήϊε Παιάν,

*Απολλον, Κοίου τε κόρας Λατοῦς σεμνὸν ἄγαλμα καὶ Ζηνὸς ὑψίστου, μακάρων βουλαῖς, ὧ ἵε Παιάν. II.

"Ενθ' ἀπὸ τριπόδων θεοκτήτων, χλωρότομον δάφναν σείων, μαντοσύναν ἐποιχνεῖς, ἰήϊε Παιάν,

φρικώεντος έξ ἀδύτου μελλόντων θέμιν εὖσεβῆ χρησμοῖς εὖφθόγγου τε λύρας αὐδαῖς, ὧ ἴε Παιάν.

III.

'Αγνισθεὶς ἐνὶ Τέμπεσιν βουλαῖς Ζηνὸς ὑπειρόχου, ἐπεὶ Παλλὰς ἔπεμψε Πυθῶδ(ε), ἐἰή>ϊε Παιάν,

πείσας Γαΐαν ἀνθοτρόφον Θέμιν τ(ε) εὖπλόκαμον θεὰν <αἰ>ὲν εὖλιβάνους ἔδρας ἔχεις, ὧ ἵε Παιάν.

IV.

"Οθεν Τριτογενή προναίαν έμ μαντείαις ά[γ]νοις σέβων άθανάτοις άμοι-[β]αις, ὶἡιε Παιάν,

χάριν παλαιᾶν χαρίτων τ[ῶν] τότ(ε) ἀϊδίοις ἔχων μνήμα <ι>ς ὑψίστας ἐφέπεις τιμά(ι)ς, ὧ ἵε Παιάν.

V.

Δωροῦνται δέ σ(ε) ἀθάνατοι, Ποσειδῶν ἀγνοῖς δαπέδοις, Νύμφαι Κωρυκίοισιν ἄντροις, ἰήῖε Παιάν.

τριετέσιν φαναῖς Βρόμιος, σεμνὰ δ(ἐ) "Αρτεμις εὐπόνοις κυνῶν ἐμ φυκακαῖς ἔχει(ς) τόπους, ὧ ἴε Παιάν.

VI.

'Αλλ'& Παρνασσοῦ γυάλων εὐδρόσοισι Κασταλίας να[σ]μοῖς σὸν δέμας ἐξαβρύνων, ἰἤῖε Παιάν,

χαρεὶς υμνοις ἡμετέροις, ὅλβον ἐξ ὁσίων διδοὺς ἀεὶ καὶ σωίζων ἐφέποις ἡμᾶς, ὧ ἵε Παιάν.

Inscriptions of the Polygonal Wall.—MM. Couve and Bourguet have published in the Bulletin de corres. hellén. (1893, pp. 343-409), the inscriptions discovered by M. Haussoullier in 1880 in the polygonal wall. A few of them had since that time been published, but the great majority had still remained unedited. They were all in the polygonal wall behind the portico of the Athenians, and were all acts of manumission of the usual type. In No. 80 there is a strange clause which allows a slave after being freed to smother any child that may have been born to her while a slave in her master's house. There are 109 inscriptions and they are printed in cursive, and the collection is provided with good indexes of proper names.

HYMNS TO APOLLON.—The fragmentary inscribed hymns to Apollon found at the Treasury of the Athenians have created more excitement throughout the cultured and musical world than any of the artistic treasures found, because here for the first time was there given us a long piece of music by which we could form some judgment of the musical genius of the Greeks. The poems in themselves are interesting but the musical notation placed over each syllable is far more important. In these specimens there are two systems of notation, dividing them into two series: a second method of division is furnished by the metre, which is sometimes Glyconian, sometimes Pæo-

nian. The subject is always the same; these are hymns composed for the Delphic feasts, and are all in honor of Apollon. They might be called peans. There are four large pieces and a number of small fragments.

In the Bulletin de corresp. hellén. (1893, pp. 561-83 and pp. 584-610), M. Henri Weil studies the text and M. Théodore Reinach the music of these hymns. M. Reinach says: "Our knowledge of this (i. e. Greek) music rested until now on the hymns attributed to Dionysios and Mesomedes, mediocre compositions of the time of the Antonines, poorly transmitted. To these documents, long known, the palacographic and epigraphic discoveries of our century had added but little; namely, the instrumental exercises of the anonymous of Bellermann, the short musical inscription of Tralles and the insignificant fragment of a chorus in the Orestes of Euripides, published by M. The discovery of Delphi has quite another importance. Without counting a dozen fragments, more or less long, it gives us finally a great song of the III or II century B. C., which from its length, its poetic and musical value and the authenticity of its text will henceforth take the first place among the remains of the music of the Greeks." This song consists in its present state, of two large slabs marked A and B, of which A is badly mutilated. The end of the hymn must have been given on a third slab which has disap-

In fragment A, after praising the son of Zeus who reveals his divine word to all mortals, the poet relates how the young god conquered the prophetic tripod by piercing with his arrows the dragon, and he compares to the legendary monster the impious and sacrilegious Gauls whom Apollon had repulsed from his sanctuary. The Muses are invited to leave Helikon to sing of their brother, the golden haired god, who inhabits Parnassos and goes with the women of Delphi to the Kastalian fountain. The hymn was apparently written to be sung, with accompaniment of flute and cithara, in a procession toward the Kastalian fountain. The hymn must have been composed not long after 278 B. c., when the Gauls attempted to plunder Delphi. The poet, whose name is broken off, is called an Athenian, and the close of the hymn speaks of the pilgrims sent from Attika. Perhaps it was a thank-hymn from Athens after the escape from the Gallic invasion.

The signs employed for the musical notation are the letters of the Ionian alphabet, straight or reversed. The note was written above the corresponding syllable of the text, but irregularly. A repeated sound was not re-inscribed. Of the fourteen signs employed twelve occur

in Alypius' diagram of the chromatic Phygian trope or tone, which is therefore, the tone used for the hymn, the other two having the same value in all tones. The diatonic part of the hymn is written in a mode whose typical scale is the octave of the Doric mode, the national Greek harmony par excellence. According to modern musical custom this scale is really that of ut minor. What difference there is between the Dorian scale that starts with Sol, and the hypo-Dorian which starts with ut, on the one hand, and our minor scale, on the other, is carefully explained by M. Reinach, who is probably the best modern authority on Greek music.

The hymn is an interesting example of the mixture of styles that characterizes the post-classical period, passing backwards and forwards between diatonic and chromatic passages.

It is only necessary to add, in connection with a second group of fragments, that in them a different system of notation with archaic letters is used which had been hitherto supposed to be used exclusively for instrumental music. It appears that for quite a while both were used as vocal signs, and only at a late period was one of the systems used exclusively for instrumental music.

The Delphic hymn to Apollon was sung thrice at Athens in the first two weeks of April in the public concerts of the Society of Lovers of Music, by the same quartet which had already given it on March 29th before the royal family and a crowded audience at the French Archæological School. The Parnassus Society is preparing another concert, at which the pieces of ancient music ascribed to Dionysios and Mesomedes shall be sung by a chorus, accompanied by an orchestra. The hymn has also been rendered in Paris with great success and on a thoroughly scientific basis, under the supervision of M. Theodore Reinach, with the assistance of the best musical talent of Paris and the aid of M. Ambroise Thomas. It is also about to be performed in London.

EPIDAUROS.—STADION.—At Epidauros the stadion is now being excavated, and the first trenchings have brought to light several rows of marble seats in perfect preservation, and resembling those of the celebrated theatre in the same place. It would seem that beneath the enormous mass of superincumbent earth and rubbish, the accumulation of many centuries, a considerable portion of the original structure has been preserved, and there are great hopes of discovering the aphesis, the terma, and the stelæ that marked the starting-point, as also the meta and the direction followed by the racers.—Athen., May 19.

Eras in inscriptions.—In a recent study of the dated inscriptions of Epidauros, published by Kavvadias, M. Homolle discusses the ques-

tion of the diversity of eras employed in them. Kavvadias maintains that several eras were used in the imperial period at Epidauros: the era of Hadrian, an unknown era, and local eras. But in M. Homolle's opinion there is but one era, that of Hadrian, and the inscriptions run from 128 to 355 A. D., instead of covering only some thirty years.—Bull. corr. hellen., 1893, p. 622.

ERETRIA.—DISCOVERY OF TEMPLE OF DIONYSOS AND OTHER STRUCTURES.—Prof. Richardson, director of the American School at Athens, writes to the N. Y. Independent of June 14, a letter dated, Eretria, May 20, from which we take the following extracts:

Last winter in a short visit to Eretria I had made a memorandum of five things to be done if I were able to begin work there in the spring, and the first on the list was to dig some trenches in the rear of the theater which was excavated by us three years ago. It had seemed to me ever since I was here at that time (an opinion shared by others) that there would be likely to be a temple of Dionysos somewhere near the theater. In some excavations, as at Olympia and Delphi, Pausanias has been an invaluable guide; but as neither he nor any other writer has told us anything of the topography of Eretria, calculation was here reduced to more or less prudent guessing. In this case our guess was right. We did not lose an hour's time when we got our men together and began work.

In the course of our first forenoon we struck a broad platform of a building only about sixty feet from the theater. In the course of the day we ascertained that this was forty feet broad. The next day we discovered its length, which was about seventy feet. This platform was very near the surface, and was very accessible. When the whole platform was swept off, it exhibited its three massive layers, making a total of four and one-half feet of depth. Probably few will be disposed to dispute the name which we provisionally give the building, viz., the Temple of Dionysos. That is what we looked for, and we seem to have found it. Unfortunately we found no inscription that would make this sure. All the architectural members of the temple, such as columns and entablature and one or more layers of the platform, have disappeared. The temples of antiquity were always the quarries of later generations, and this temple probably lay long on the surface inviting to plunder.

During our second week we have cleared the ground to the east of the temple, laying bare what seems to be a great altar. This lies in the rear of the stage building. Then digging from the north side of the temple we have discovered a stoa of considerable extent leading out of the west parodos of the theater. Perhaps our most valuable discoveries from a scientific point of view are being made in this west parodos, which had hitherto been neglected. Of this it is too early to speak.

Simultaneously with the work on and around the temple we have excavated a part of a street not far away where the foundation walls protruded from the ground. We have also uncovered several water conduits and an interesting series of four large stone tubs, from one to the other of which water used to run. These are numbered Γ , Δ , Γ , Δ , and we have christened it "the city laundry."

A well-known shaft was found adjacent to the south wall of the temple. This was cleared very slowly. After going down ten feet it opened into a lateral passage which was explored to a great distance. The fact that there are carefully cut holes for feet in two of its sides indicate that people went down into it.

We have also made the first serious excavations yet undertaken with a view to locating the temple of Artemis Amarysia, the most famous temple of the Eretrians, a mile outside their city wall. We failed, finding only walls of a later time. We have simplified the problem for our successors by eliminating one of the possibilities. No one need dig again at the foot of Kotroni.

Another interesting work has been the opening of a large tumulus like that on the plain of Marathon, containing the bones of the Athenians who fell in the battle. After cutting three roads into it, and going down in the center to a depth of twenty-five feet, carrying out the earth with wheelbarrows, we were forced to the melancholy conclusion that somebody had been there before us. As the mound looked practically intact from the outside, and as not even the oldest inhabitants know anything of these previous excavations, our predecessors may have done their work many years ago, and covered its traces quite effectually. We find to our surprise that the central core of the mound is a stone tower twenty feet high and fifteen feet square. Our predecessors had broken away over half of this on the southern side, until they came to the bottom, where they appear to have found the tomb which they sought. They must have worked from the top with crowbars and baskets.

In the course of our work about the temple we have found some objects of minor importance, among which a pretty statuette head of Aphrodite in marble holds the first place.

I may add, in closing, that one result of our work is that we probably now know where to dig with good results for more knowledge of Eretria. KALAURIA.—The Swedish archæologist, M. Wide, has applied to the Greek Government for permission to excavate the Temple of Poseidon at Kalauria.—Acad., May 26.

LAKE KOPAÏS AND ISLAND OF GHA (BOIOTIA). — MYKENÆAN REMAINS.—A supplementary note to Perrot's first volume on Greece, published a few months since, gives the following information:

"M. de Ridder, a member of the French School at Athens, carried on in June, 1893, some excavations in the island of Gha, which will be fully reported in the Bulletin de correspondance hellénique. The excavations have brought to light a large building situated in the northern part of the island, composed of two wings that are joined at right angles. The first building runs from east to west, bending slightly southward: it is flush with the wall of the island. At that point this wall is two metres thick; but elsewhere it reaches a thickness of 5.50 met. The second structure forms an elbow to the east of the first and extends southward. The length of each wing is about 60 met. and the width 10 met. Both end, one at the west and the other at the south, in two large towers placed at a lower level. In the interior the arrangement in long corridors, vestibules and dwelling-rooms, recalls that of the palace of Tiryns. The sills are formed of similar large moulded slabs. The bronze hinges are also analogous. The flooring is made of the same kind of coating of lime; and the walls rise to the same height. Finally, there are evident traces of fire. Great causeways join this palace to the doorway opened up in the south wall of the island. Numerous fragments of rude pottery concur in proving the island to have had a permanent population."

The enormous constructions around the lake belong to the earliest period of Greek history. More than a thousand years B. c. great efforts were made to dyke the unhealthy lake and make its surroundings habitable. Ancient writers inform us that at a very early date Kopaïs was confined and the land cultivated by the Minyans, an agricultural people that came from Thessaly to colonize Orchomenos. Both M. Kampanis in the Bull. corr. hellén., and Prof. Curtius in a paper before the Berlin Academy, have called attention to the ruins.

We cannot give space to an analysis of the two interesting papers by M. Kampanis in the *Bulletin* on the hydraulic works on Lake Kopaïs, in which he not only gives a practical study of existing works, but gives an historical sketch of their different phases, distinguishing the historic from the prehistoric works.

We read in the Bull. corr. hellén., 1893, p. 631: "M. de Ridder, with the authorization of the English company of Lake Kopaïs, has explored the akropolis, which is one of the largest and best preserved known, more extensive than those of Mykenai and Tiryns. He has excavated in the ruins of monuments within the walls, discovering constructions that resemble a palace and a long building in the form of a portico. He has drawn up plans, which will be published together with those of the enclosing wall, long since prepared by M. Lallier, director of the work of the lake. Some fragments of painted stucco

and of Mykenman pottery have been found on the site.

Dr. Noack, of the German Institute, also investigated in 1893 the region of the Kopaïs, seeking everywhere in the interior and around the borders of the lake for remains of cities or fortifications. He has tested by his own observations, and admits in their general aspect and in most of their details the results of M. Kampanis' study of the hydraulic works of Kopaïs. He found around the lake a number of cities or fortresses which seemed to him to have for their main object the defense of the canals, dykes and exits which guaranteed safety and wealth to the Kopaïs plain. He has drawn up the plans of all the wall circuits, including that of Gha. According to him, this very important city bore anciently the name Arné, and was a Minyan city.

KYZIKOS. - THE WORKS OF ANTONIA TRYPHAINA. - Several papers have recently had as their subject the inscription commemorating the works undertaken by Antonia Tryphaina at Kyzikos. Antonia Tryphaina, married to Cotys, King of Thrace, and cousin of the Emperor Caligula, came of an illustrious family of Asia Minor that had long been devoted to the Roman cause, and which had received in recompense the Kingdoms first of Pontus and the Bosphorus, and afterwards of Thrace, Pontus and Minor Armenia. The position of Kyzikos at the head of the three routes penetrating into Asia Minor, made it worth while for Antonia Tryphaina to put forth great efforts to Romanize it. This she did by making this city her residence and undertaking there a great series of public works to develop its commercial importance. The inscription in question, first published in 1891 in the Mittheil. Athen., was republished in 1893 with a commentary by André Joubin, in the Revue des Etudes Grecques (1893, p. 8, sq.), where there also afterwards appeared supplementary notes by Joubin (1894, p. 46) and Theodore Reinach (1894, p. 58). According to it: (1) Tryphaina consecrates to the emperor (evidently Caligula) the reparation of the city; and (2) she re-opens the strait which had previously been closed for fear of war. The date is 37-41 A.D. M. Joubin concludes that the narrow strait that anciently divided the mainland of Asia from the rocky island on which Kyzikos was built, was filled up with rocks at the time of the wars in Thrace between A. D. 21 and 26. The filling up of the strait closed the port and necessitated the dividing of an

attacking fleet, as Kyzikos was built on two ports, separated by the strait.

It is probable that the strait remained closed for about a dozen years, and commerce suffered in consequence, until the works carried on by Tryphaina. In charge of them was the engineer Bacchios, of whom an inscription has been found at Kyzikos, and purchased, as well as that of Tryphaina, by the Museum of Constantinople. It reads:

Βάκχιος 'Αρτέμωνος τοῦ Βακχίου γενόμενος ἐπὶ τῆς ὁρυχης τῶν λιμένων καὶ τῆς λίμνης καὶ τῶν διωρύγων καὶ τῆς ἐποικοδομίας τῶμ προκειμένων χωμ[ά]των καὶ ἐπ]αινηθείς καὶ στεφανωθείς ὑπὸ τῆς Βουλ]ῆς καὶ τοῦ δήμου, Ποσειδῶνι ἀ[νέθηκεν.

It is a dedication to Poseidon, contemporary with the decree in honor of Tryphaina, near which it was found, and it mentions more in detail the works alluded to in the decree. He cleared $(\delta\rho\nu\chi\hat{\eta})$ the ports, the marsh and the canals of sand and built, or rather rebuilt, two protecting moles, one in front of each port. The two ports $(\lambda\iota\mu\acute{e}\nu\epsilon)$ —one on the east and the other on the west of the sandy isthmus—were joined by a canal $(\epsilon\dot{\iota}\rho\epsilon\acute{\iota}\pi\omega\nu$ and $\delta\iota\omega\rho\acute{\iota}\gamma\omega\nu$) on two branches, which met, toward the centre, in a rectangular marsh $(\lambda\acute{\iota}\mu\nu\eta)$, situated south of the city.

M. Reinach's article, entitled "Ile ou Presqu'ile," satisfactorily solves the question whether Kyzikos was an island or a peninsula. Ancient authors contradict one another. Pseudo-Skylax, Pomponius Mela, Stephen of Byzantium make it a peninsula. Apollonius Rhodius, Strabo, Pliny, Frontinus call it an island. Ælius Aristides calls it both. The scolia to Apollonius state that it was at first an island and became afterwards, artificially, a peninsula. Among modern writers, Mannert is alone of the opinion that Kyzikos was originally a peninsula. The term διώρυξ in the inscription of Bacchios clears up the difficulty, for it can only mean a canal dug by the hand of man. Originally, therefore, Kyzikos was a peninsula, and thus it was at the time of Pseudo-Skylax, in the middle of the fourth century. Shortly after the inhabitants pierced the isthmus, and at the same time, in order to retain communication with the mainland, they built two bridges across the two branches of the canal. The language of Strabo shows that these works were still intact. Then came, under Tiberius,

the filling in of the canal, which was, after a while, reopened by Antonia Tryphaina.

LIVADIA (BOIOTIA'. - ORACLE OF TROPHONIOS. - Two Greek students from Livadia, in the ancient Boiotia, believe they have discovered the siteof the oracle of Trophonios. North of Livadia, opposite the stream of Herkyna, is an unnamed hill, on the east bounded by the Herkyna, on the west by the brook Probation, on the north by the hill of Laphystion, and on the south by the town. On the western side of this hill lies a little church of St. Sophia. Beneath it, however, is a grottolike crypt, 4.30 metres deep, a depth that would correspond pretty well to Pausanias's eight ells. Pausanias, from his own account (ix. 39, 10), had not measured the depth himself. This quite small grotto is not natural, but artificial, and it answers to the description of Pausanias. On the south side of the grotto are steps which lead to a throne with three hollow seats. Pausanias says it was the seat of Mnemosyne. Close by one sees other seats placed in a winding line which reaches to the river; but opposite the stream are niches and a construction designed for ablutions. On the east of the grotto is a cliff shaped like a bank (the κρίβανος of Pausanias), upon which are to be seen niches and other traces of ornament. A little further off is a natural hole. Can it be the concealed entrance? It is stopped, and when it is knocked the sound is dull. The northern side lies somewhat higher than the others, and is connected with the eastern by a step hewn in the rock and a door of which only a fourth part is preserved. So far as the report goes of the supposed discovery, the Inspector of Antiquities, to whom application was made, thought it reasonable to make further investigation, and grant the means necessary for continuing the examination. Schliemann, it may be remembered, occupied himself some years in searching for the cave, and made some excavations which led to no result. In 1839 Stephani conjectured that the oracle was under the church of St. Sophia, and Hettner opposed the idea.—Athenaum, May 5.

ORCHOMENOS.—M. de Ridder is said, in the Bull. de corr. hellén. (1893, p. 631), to have made some very interesting discoveries at Orchomenos. In excavating in the lower part of the city he discovered a temple of Asklepios (?) and a necropolis where he collected large numbers of Corinthian aryballoi, proto-Corinthian vases and fragments of bronze, among which were several stamped plaques of archaic style, decorated with geometric ornamentation and animals, such as a sphinx, a horse, etc.

PHOKIS (SEE ALSO DELPHI).— While the excavations at Delphi are being carried on Phokis will be thoroughly explored. M. Ardaillon

made a beginning last year in the region of Chrysso and Kirrha, with the assistance of M. Convert; all ancient ruins will be drawn and photographed, and the network of roads will be studied with especial care. At the same time the geology, flora and fauna will be studied. A meteorological station has already been organized at Delphi, and it is proposed to study the part that may have been taken in the creation of the myths and legends by atmospheric phenomena, nature and the products of the soil.

RHAMNOUS.—STATUE OF NEMESIS.—In the Jahrbuch Arch. Inst. (1894, pp. 1-22), L. Pallat writes of The Basis of the Nemesis at Rhamnus (pls. 1-7; one cut). Leake, Demi of Attica (Topography of Athens, vol. II.), p. 109 (ed. 1841), mentions "fragments of figures, in high relief," "found among the ruins of the temple of Nemesis." He adds that they were about a foot high, and suggests that they formed a part of the relief of the basis of the statue. In 1890 fragments of figures in high relief were found at the same place by the Greek Archæological Society. Some of them were published by the finder, Mr. Staïs ('E\phi. 'Aρχ., 1891, pl. 8, 9). They are now in the National Museum at Athens (Nos. 203-214). All the fragments, forty in number, are here published and discussed. They are of Parian marble, work of the fifth century, B. c. From the fragments and the description of Pausanias (1. 33, 7, 8), the relief of the basis is restored. On the front of the basis was Leda conducting Helen to her mother Nemesis. Beside this central group are Tyndareus and the Dioskouroi at the left, Agamemnon, Menelaos and Pyrrhos at the right. These figures were probably made known by inscriptions. On one side of the basis was a man with a horse, on the other a horseman and a squire. The composition is after the manner of Pheidias, but the details, especially in the drapery, show an increase of refinement (verfeinerung). work belongs to the school of Pheidias, but not to Pheidias himself. As the basis and the statue of Nemesis were doubtless by the same artist, the statement (Zenob. v. 82, Pliny, N. H., xxxvi. 17), that the statue was by Agorakritos, deserves credence rather than that of Pausanias, who ascribes it to Pheidias.

SAMOTHRAKE.—In the Mitth. Athen., 1894, pp. 132-136, M. Fränkel republishes with emendations The Hippomedon-Inscription from Samothrake published by O. Kern, Mitth., 1893, p. 348 sqq. Fortifications at Samothrake were evidently nearly completed. The inhabitants granted Hippomedon the right of giving to others freedom from import duties and the privilege of exporting grain. The general prohibition of grain-export at that time appears to have been due to attacks of pirates and consequent failure of agriculture.

O. Kern contributes to the Mitth. Athen. (1893, pp. 336-384), an article "from Samothrake," giving the results of a visit to the island in July, 1892. He presupposes an acquaintance with the Austrian Untersuchungen auf Samothrake and with Rubensohn's Mysterienheiligtümer. Investigation of the hill on which the Nike stood is still imperfect, further excavations being needed. A sketch of the walls and substructions at that point is given. Thirty-nine inscriptions are described, of which thirty-one are published, nearly half being new. Nearly all are due to Mr. Phardys, the local physician. The most important are:-1) an inscription in honour of the Lacedæmonian Hippomedon, son of Agesilaos, general of king Ptolemaeus III. on the Hellespont and in Thrace, confirming the report of Telos (Heuse, Teletis reliquia, p. 16, 2). Hippomedon had cared for the security of Samothrake, perhaps against the Macedonians. The date must be between 239 and 223 B. C. 2) The inscription Rubensohn, Mysterienheiligtümer, p. 227. Cuts represent the front and back of the stone as well as two coins of Kyzikos. The round building on the coins (and in part) on the stone, may have been a sort of city coat of arms of Kyzikos. 3) The stone of Demokles (Rubensohn, p. 160 ff. and elsewhere) also represented by a cut. The lists of mystai on this stone were inscribed at different dates. 4) A brief inscription (No. 27), interesting as affording the first proof of the worship of Aphrodite at Samothrake. At the foot of the hill Hagios Ilias a number of terracottas, marble statuettes, etc., show the former existence of a shrine of some sort. These are mostly of poor workmanship and comparatively late date. One terracotta of a goddess with polos, head cloth, and necklace, holding a bird, is ascribed by Brückner to the sixth century B. c. Two roughlyworked reliefs, representing one a man and two women, the other two women, are described. Fragments of similar reliefs were seen. A relief of a fish recalls the sacred fish Pompilos, and an ithyphallic Hermes reminds the writer of Herodotus II. 51.

In the Mitth. Athen., 1893, pp. 385–394, F. Hiller von Gaertringen publishes six inscriptions relating to the Samothrakian gods in Rhodos and Karpathos. Three of these are new. No. 2, from the city of Rhodos, not earlier than the first century B. c. is a fragmentary list of priests of the Samothrakian gods. No. 6, from Tristomo, Karpathos, is a longer list of priests. No. 3, found near the city of Rhodos, reads [τὸ κοι]νον. Σαμοθραικιαστῶν Σωτηριαστῶν ᾿Αριστοβουλιαςτῶν ᾿Απολλωνιαστῶν Θεαι(αι)δητείων ᾿Αστνμηδείων.

STRATOS.—M. Joubin promises to publish shortly a report on the excavations which he carried on at Stratos between April and July, 1892. In the meantime he publishes in the *Bull. corr. hellén.* (1893,

p. 445) the inscriptions which he discovered there. No. 1 is a bronze plaque whose inscription engraved with the point contains (a) a decree of the city of Stratos conferring proxeny and privileges on Lysias, son of Kallias, a Megarian, his two sons and their descendants; (b) an additional article adopted on the proposal of Bolarchos of Phoitia adding atelia to the above advantages. The alphabet is the Akarnanian, and it is archaic. As Corinthian influence was paramount in Akarnania up to the middle of the fifth century, when the influence of Athens was introduced, and as it is seen here, the date of the inscription cannot be earlier than the close of the fifth century. The dialect is Dorian. 2. Decree of proxeny, III cent. 3. List of names, IV cent. 4. Block from altar with manumission of slave in form of sale to divinity, II cent. This divinity is Zeus, and this fact is important as being the only proof that the temple of Stratos was sacred to Zeus.

TEGEA.—Excavations proposed by the French School.—The good news has come that the French School is about to undertake excavations at Tegea with the object of thoroughly uncovering the temple of Athena Alea, which was certainly one of the most important buildings of the Peloponessos. Of course it is hoped that sculptures by Scopas may come to light. The Greek Minister of Public Instruction has appointed a Committee which is to study the site, the location of the excavations proposed by the French School, and to estimate the value of the property to be expropriated.

THORIKOS.—An entire city has been found at Thorikos near Laurion, destroyed and buried by some convulsion of nature unknown to history. It appears to be not a Greek city of the historic period, but of the prehistoric or Mykenæan age. At least this is to be inferred from the objects discovered.

At the very beginning of the work of excavation two royal tumuli were opened on one side and the ruins of a palace on the other. The tumuli are about 250 metres apart. One, of circular form, is situated some thirty metres below the palace which is built on the rock of Thoriko which rises above the surrounding plain. The other tumulus remarkable for its helicoïdal shape, was in so ruinous a condition that it has been up to the present impossible to entirely clear it. These tombs had both been ransacked at some previous period.

The following is the list of the objects found by the Greek Archaeological Society at whose expense and under whose direction the excavations were undertaken. Two fibulae, one of gold the other of amber: a gold ring: an ivory comb, beautifully worked, to fasten the hair: an ivory needle: some ten pearls of glass, jasper, etc: two stone arrows of very fine workmanship: an ivory quiver: gold myrtle and

laurel leaves; a leaden disk decorated with colored concentric rings. Six similar disks have been found in other tombs and the archæologist in charge believes them to be money. Among the finds is a perfectly preserved skeleton, which is important on account of the great rarity of skeletons of this early date and their usual poor preservation. There were also fragments of statues of Zeus and Apollo, a marble vase and fragments of domestic vases mingled with bones of animals and birds and with shells. It is concluded that these are all remains of the funerary repast.—Chron. des Arts, 1893, No. 35, from the Messager d'Athènes.

ITALY.

PREHISTORIC AND CLASSIC ANTIQUITIES.

USE OF RINGS IN ANTIQUITY AND THE EARLY MIDDLE AGES .- M. Deloche, whose articles on Merovingian seals and rings have been running through the Revue Archéologique like a perennial brook for the last ten years and more, took a broader view of his subject in a memoir with the above title read before the Acad. des Inscriptions. The ring was at first reserved for the use of those who had distinguished themselves by some warlike exploit or rendered the State some service. It afterwards became one of the privileges of the patricians, equites and magistrates. Originally there were only iron rings; the ambassadors of the Republic alone wore in public gold rings. Later various metals were employed to distinguish the different orders of the State: the senators and knights alone had the right to gold rings; freedmen wore silver rings and the plebs iron rings. As early as the third century the freedmen claimed gold rings, and the Constitutions of Justinian gave them this right. As for the slaves, during the entire period of Roman dominion they were restricted to iron rings.—Revue Arch., 1894, rt, 107.

GOLD IN MOSAIC WORK.—M. Eugène Müntz, in a recent study on mosaic technique, stated that no cubes of gilt glass had been found in mosaics earlier than the third century A. D. In a January meeting of the Soc. des Antiquaires, M. Heron de Villefosse exhibited such a mosaic cube from the collection of Count d'Herrison, which dates from the second century.—Bull. Soc. des Antiquaires, 1893, p. 76.

ALTAVILLA SILENTINA (LUCANIA).—Two tombs have been opened in the territory of Altavilla Silentina, facing north and south, about one metre apart. Both are built with equal solidity and regularity, but one of them is richly decorated while the other is perfectly plain; and many objects were found in the first and none in the second.

The richest tomb is rectangular and with a high gable top: it is constructed of six slabs of tufa and measures 1.95 m. long, 1 m. wide, 0.92 m. high, beside 0.50 m. to the top of the gable. The inside of the slabs is covered with a very fine plaster, on which are painted figured scenes in outline and in monotone masses. The E. side has a contest of two warriors. They are naked and wear the galea, cingulum and cnemides and are armed with shield and spear (Eteokles and Polynikes?): between them lies a pomegranate, and to one side stands a female figure (Antigone?) resting on her right leg. The warriors are painted in red body color with black outlines; the female figure is outlined in black with but little shading of the drapery. On the opposite long slab is a quadriga driven by a winged Nikê, before which rises the column of the meta. All the figures are outlined in black with a little shading of the same color. The design is accurate, free and elegant; it recalls the good period of Greek art. At the N. end are two animals, a lion attacking an ibis, the former in yellowish monochrome, the latter in black outline. In the gable above is a cock in outline and reddish body color, pecking at a bunch of black grapes. On the opposite end there remain merely traces of a scene representing a warrior approached by a female figure presenting him a patera with her left hand. This woman, like the one on the E. side, is robed in a long chiton and himation. The figures that are delicately sketched in black are especially charming. The work belongs to the third century B. C. and is certainly Greek. Several Lucanian painted vases were found in the tomb,—Not. d. Scavi, 1893, pp. 423-27.

BENEVENTO.—At Benevento, according to a recent communication made to the Royal Academy of the Lincei, the fragment of an Egyptian statue in granite with hieroglyphics, and a piece of granite obelisk also inscribed with hieroglyphics, have been disinterred. The statue, according to the examination made by Prof. E. Schiaparelli, of Florence, must be referred to the end of the reign of Rameses II., about 1340 B. c., and may have been brought from Egypt to adorn the temple of Isis at Beneventum-a temple which is mentioned in the inscriptions of the obelisks, and which, like the temple of Isis in the Campus Martius at Rome, was adorned with Egyptian statues of various dates. The fragment of obelisk fortunately fills up a gap in one of the known obelisks of Benevento, and enables us plausibly to supply other gaps on the same obelisk. From these inscriptions it would appear that both these obelisks were transported from Egypt; but they are of late workmanship, having been made for the temple of Isis at Beneventum, which was built by Lucilius Rufus by order of

Domitian.—Athenæum, Feb. 3, 1894.

BOLOGNA.—M. Geffroy communicated to the Acad. des Inscriptions during the past summer a paper on the subject of the new excavations undertaken in the vicinity of Bologna, which seem likely to furnish decisive information on some of the étapes of the Etruscan people in Italy. A funerary stele recently found at Novilara (q. v. in this issue, p. 323, and pp. 279–81 of vol. viii of Journal), near Pesaro, has the representation of a wild beast hunt with a Sabellian or Illyrian inscription in twelve lines, which is to be published by the Academia dei Lincei.—Revue Arch., 1894, I, p. 106.

CASTEL TROSINO .- MAGNIFICENT BARBARIC OR LOMBARD ANTIQUITIES .- In digging on some land belonging to the parish church of the village of Castel Trosino, about six kilometres from Ascoli Piceno, some tombs came accidentally to light, the contents of which soon began to attract the attention of the neighbors. On being informed of the occurrence, the Minister of Public Instruction ordered a regular exploration of the place to be undertaken under the direction of Prof. Brizio, of the University of Bologna. The result of his researches has been really splendid, and when fully made known to the public will awaken the greatest interest. The tombs, of which about 150 have been already explored, belong to a post-Roman necropolis, and their contents far surpass in abundance and richness all similar discoveries hitherto made on Italian soil. They consist for the most part of gold and silver ornaments, such as crosses (some of which bear inscriptions), brooches, clasps, circular and broad-headed nails, sheaths for knives and daggers, necklaces formed of mounted Byzantine coins, &c. To these must be added arms, fragments of breastplates and other armor, and an important series of fine articles in glass. The style of the whole of this hoard is distinctly Lombardic; small crosses in gold were worn sewn on the dress at that period among that warrior people. But the position of Castel Trosino corresponds to no Lombard duchy known to us, and the study of these precious remains, which have been brought to Rome and placed in the new museum of the Villa di Papa Giulio, may result in throwing light not only on the history of barbaric art, but also on that of the settlements of the Lombards in the peninsula. Another small necropolis belonging to the same period, but of lesser importance, has been discovered near Borgo Masino, in the Province of Turin. Here also, together with swords, lances, bits and horse trappings in bronze, were collected gold crosses, and earrings embellished with filigree work of Lombardic style.-F. Halbherr in Athenæum, Feb. 17, 1894.

CASTELLAZZO DI FONTANELLATO (NEAR PARMA).—PREHISTORIC CITY.— Fresh contributions to the study of the prehistoric settlements of Northern Italy has been furnished by the excavations of Prof. Pigorini in the terramara of Castellazzo di Fontanellato, near Parma. We are now well-nigh in possession of a complete plan of a prehistoric city, which, from the results of partial discoveries recently made, would appear to have been quadrilateral and oriented, having its sides more or less modified in direction in order to allow the water to run into the fosse that surrounded it. The interior of the settlement appears to have been really traversed from north to south by a decumanus, a particular which would confirm the conjecture of Prof. Chierici that in the terramare we have the prototypes of the first Italic cities. Parallel to the decumanus, and adjoining the eastern rampart, was discovered a large rectangular mound of earth, 120 metres in length and 60 in width, surrounded on all sides by a ditch 30 metres wide, just like the ditch running round the whole terramara. Spanning the western fosse are the remains of a bridge giving access from this raised platform to the centre of the city, and abutting on to the decumanus. The existence of this raised mound, which in the Castellazzo terramara is found for the first time, arouses the greatest interest. Prof. Pigorini is inclined to think it may be the temple or citadel, namely, a kind of arx or acropolis. Another important discovery has been made in one of the two necropolises-in that which lies at the southeast angle outside the enclosure, and is in the form of a square. The necropolis, like the city, is surrounded by a ditch and is formed of ground raised by means of piles. The city of the dead would appear in those times (if this circumstance is confirmed by other burial-grounds of the lakedwellers) to have been an exact imitation of the city of the living, just as the tombs of the remotest ages of Greek and Italian civilization were exact imitations of the huts or dwellings of the living. This burial-place, as well as the other on the west side, which has been so far but little explored, was used for cremated bodies. Near the first is a piece of ground baked by the fire, which was evidently used as an ustrinum.-Frederick Halbherr in Athenæum, Feb. 17, 1894.

COMO.—TRANSFER OF THE MUSEUM.—The Museo Civico of Como has been removed to far better quarters, in the historically famous Palazzo Giovio, which will also receive the Notarial Archives. The first two numbers of the catalogues of the museum have appeared, including the pre-Roman and Roman collections. The Revista Archeologica di Como has begun in No. 35 the publication of the Roman and Christian marbles in the museum.—Archivio Stor. Lombardo, xx, 2, p. 561.

7.) RENCE.—Prof. Milani has recently drawn attention, in connection with the recent excavations in Florence, to the similarities between the forums of Florence and Pompeii. In Florence as at

Pompeii the Baths are placed behind the Capitolium; the position of the temple of Jupiter Capitolinus, with its triple cella, corresponds, though that in Florence is more sumptuous, as are also its Baths, which were built twice over on the ruins of a Roman house of the Republican period (π or ι cent. в. с.). Furthermore, the rectangular well recently discovered in Florence near the woman's bath, with its relief representing the river Arno, corresponds to the rectangular well of the small baths of Pompeii, placed between the tepidarium of the men and the calidarium of the women, and it reminds also of the cistern of the same baths.—Not. d. Scavi, 1893, p. 493.

GRADISCA (VENETIA).—Near the village of Gradisca, where the torrent Cosa joins the Tagliamento, a Roman fort has been recently found, of trapezoidal shape, with four entrances, one on each side. It is built up entirely of earth, and appears to be on the site of a very ancient centre of population of the Veneto-Illyrian race. This is made the more probable from the prehistoric remains that have here come to light, and which appear to have originally come from early tombs torn up in the course of the construction of this fort.—Not. d. Scavi, 1893, p. 487.

MILAN.—Additions to the Museum.—Dr. Giulio Carotti publishes in the Archivio Storico Lombardo (xx, 2, pp. 442-496) a report on the antiquities and works of art that were added in 1892 to the Brera Museum, now called the Museo patrio di Archeologia di Milano.

Prehistoric.—In May, 1892, the sale of the collection belonging to Amilcare Ancona took place at Milan, and a considerable number of objects were purchased for the museum. Among them were the following prehistoric pieces: (1) A small terracotta urn from Golasecca, still containing a broken bronze fibula and fragments of iron objects. (2) A well-preserved small bronze scythe-shaped hatchet. (3) A bronze box or cista a cordoni, with intermediate rows of raised dots, in imperfect condition but important. (4) A long bronze sword from the neighborhood of Codogno, belonging to the end of the bronze age. Each side of the blade is divided in two oblong sections by a cylindrical raised line. (5) A bronze sword of fleur-de-lys shape from Casalbuttano in the province of Cremona. It belongs to the bronze age and is remarkable for the thickness of the blade. (6) Ten bronze paalstabs found near Lodi, some entire, some reduced in size by use in the bronze age itself. (7) Two fine bronze torques in perfect preservation, found with the paalstabs mentioned above. (8) Four paalstabs from Modena and Rome; six small poniards from Verona. (9) Two bronze situlas or pails found at Vhò (Cremona).

Greco-Italia.-A series of Greco-Italian statuettes, heads and two terracotta cups from Lucania and Apulia. The thirteen statuettes are of the free Tanagra type, but undoubtedly of South Italian workmanship. One graceful female statuette, 16 cent. high, preserves black color in the hair, red on the face and blue on the himation. There are also: three standing females with veiled heads; a youth leaning on a column; cupid holding a dove; an Aphrodite (?); four seated females of varied types. The nine heads are: four of Dionysos -one archaic in type; an Athena; two females with a high stephanê; a grandiose helmeted male head; and another beardless head crowned with flowers. (2) A red-figured Kylix with a seated satyr holding a ryton in his left and stretching his right hand toward a nude woman with a cloth wrapped about her head, who is bending over the satyr: from the Ancona collection. (3) Patera from Canosa. A black ground decorated in red, brown and white, with fish, shells, etc.: from the Ancona collection.

Italic and Etruscan.—(1) The fine series of twenty-six helmets, two Greek and the rest Italic, which Sig. Ancona had collected, was dispersed at the sale. Two fine specimens, Nos. 13 and 15 of the catalogue, have been given to the museum. No. 15 is a bronze helmet with round calotte, having a decorated border that widens slightly in front like a narrow visor. It has two guanciali: from Sotassa. No. 13 is of bronze and has a high calotte, terminating in a button with pearl ornament. Below it has a border with geometric lines and a twisted rope pattern: from Orvieto. (3) Fragments of a bronze brazier with elegant palmette decoration and dragon's feet, as well as a decoration of raised pearls. A large bronze cup with raised pearl ornament: both from the Ancona sale; found near Chiuse. (3) Three Etruscan cinerary terracotta urns: the largest belongs to the Greco-Etruscan style (c. 300 B. c.), and on its cover half reclines a beautiful female figure. She holds a leaf-shaped fan in her right hand and her head is encircled with a stephane. There remain traces of color. The bas-relief on the front represents the fratricidal combat of Eteokles and Polynikes. The second urn bears the figure of a youth, and the third that of a young woman: on the former are traces of color and on the latter only the white ground for it.

Roman. — (1) Two cippi whose inscriptions are published by Mommsen in the C. I. L., Nos. 5750 and 5701, and described as in Monza. (2) A marble Roman composite capital with a decoration sacred to Neptune, of dolphins, tridents and shells, beside the floral ornament. (3) A marble decorative fragment. (4) A collection of Roman antiquities from a necropolis found in 1883 in the Royal Park,

with interments dating between the first and the fourth century of our era. (5) Some Roman objects found in a necropolis at Gerenzano.

NAPLES.—Roman Baths.—Between the old Via dei Morceanti, called also del Sedile di Porto, and the new street of that name, some ruins of Roman baths have come to light which appear to explain the so-called grotto or crypt under the chapel of S. Aspreno. This crypt appears to have formed a part of these baths, and its peculiarities are thus explained.—Not. d. Scavi, 1893, p. 432.

NOVILARA. - ETRUSCAN ARCHAIC SCULPTURED AND INSCRIBED STELE. - A recent discovery of the first order is that of a very ancient stele, which, together with some figured representations, bears a well-preserved inscription of twelve lines in Italic characters. It came to light in excavating the necropolis of Novilara, near Pesaro, namely, in that same territory where have been obtained in past times other figured stelæ of a very peculiar character. One of these latter, most resembling our present one, was made an object of study some ten years ago by Prof. Undset, who recognized in the ornamentation a distinct Mycenæan character, and explained its presence there by means of the commercial and other relations between the East and the Italian coasts of the Adriatic. The new stele has been brought to Rome and placed provisionally in a private room of the new museum at Diocletian's Baths, until Prof. Lattes, of Milan, shall have published his illustrations of it and the result of his studies thereon. The stele is eighty centimetres high, and is worked on both faces. On the top of the front face is carved a wheel of four spokes, and beneath it is a scene of combat between men and animals divided into two compartments. One portion displays various combatants armed with lances, and one armed with an axe, and near them are men and reptiles lying on the ground. In the other portion are to be seen two men, delineated in a very primitive fashion, one fighting with a bull and the other with a bear. On the left, by the side of one of the combatants, stands a pyramid. The other face of the stele is also surmounted by a wheel, but of five instead of four spokes, underneath which are twelve lines of writing, clearly engraved and very legible. On the left of the inscription is a pyramid, and on the right a cross, while all around runs a border consisting of two wavy lines. The text, which was at first thought by some to be Sabellian, and by others Illyrian, appears now to be recognized by Prof. Lattes as Etruscan.—F. Halbherr in Athenæum, Feb. 17, 1894.

PALESTRINA.—THE TEMPLE OF FORTUNA PRAENESTINA.—In clearing out the earth in the area of the atrium of the temple of Fortuna Praenestina a number of architectural fragments belonging to the decoration

of the temple were uncovered, and also two fragments of marble statues—the lower part of a male figure with the *paludamentum* and the lower part of a female figure, perhaps representing Fortuna.— *Not. d. Scavi*, 1893, p. 420.

PRATA (APULIA).—CHRISTIAN INSCRIPTION.—At about two kilom. from Prata (prov. of Avellino) is an early basilica called *l'Annunziata*, next to which is a catacomb-grotto excavated in the tufa (cf. Arch. Stor. prov. nap. III, 1). An inscription painted in white letters on black ground on the wall of the grotto has recently come to light, and reads:

HIC LVCIANVS CVM BONA PACE
QVIESCIT INNOCES MANSVETVS
MITES LETVS CVM AMICIS AMICVS
VIXIT ANNIS PL M L NVLLA MANENTE
QVERELLA DEPOSITVS EST IN PACE
DIE

MARCIANO ET ZENONE VV CC. CONS.

Flavius Marcianus was consul in 469, and was son of the Emperor Anthemius. His colleague Zeno was made consul at Constantinople by the Emperor Leo.—Not. d. Scavi, 1893, p. 422.

ROME.—Acts of the Archeological Commission during 1893.—According to the *Bullettino* of the Roman Archeological Commission (1893, pp. 300-1), the following is a record of its activity during 1893:

I. Removal from the church of S. Antonio al Esquilino of the two compositions in marble opus sectile, which originally formed part of the rich decoration of the civil basilica built in 317 by the consul Junius Bassus. They have been placed in the Capitoline Museum. These works have long been famous and are the classic examples in this branch of art. They have been illustrated in the Bullettino itself by Prof. Orazio Marucchi in an article accompanied by two double plates.

II. Re-composition of the fragments of an altar and marble aedicula with bas-reliefs and votive inscriptions, found in 1875 in Piazza Manfredo Fanti, and belonging to a private sucrarium of foreign soldiery.

III. Restoration for the Capitoline Museum of the mosaic pavement with figures allusive to the mystic worship of Cybele, which belonged to the residence of the dendrophori on the Coelian, with the inscription relating to their basilica Hilariana.

IV. Decision to reconstruct on its own site the sepulchral monument of the consul Sulpicius Galba, which was discovered in the quarter of Testaccio.

V. Exploration in Via Lanza, near the apse of the church of S. Martino, in order to ascertain the architectural arrangement of the ancient building (praedium Equitii) on which Pope Symmachus erected this church in the first years of the sixth century.

The Commission has intervened in various ways in connection with the proposed great archæological boulevard around the city.

The Republican Comitium.—Ch. Huelsen has an article in the Roman Mittheilungen of the German Institute on "the Comitium and its monuments during the Republican period" (one plate). He studies the comitium before the changes that took place under the Empire, determines its limits and its orientation, and then explains the hitherto obscure passage of Pliny on the accensus of the consuls, by which notice of midday was given from the Curia. Then follow notices of the other monuments of the Comitium of which we are told by ancient writers, such as the Basilica Porcia, the Columna Maenia, the Puteal of Attius Navius, etc.

WAS THERE A TEMPLE OF JUPITER DOLICHENUS ON THE AVENTINE,-Marini, and after him a majority of archeologists, have stated that there was a temple of Jupiter Dolichenus on the Aventine, and, more precisely, on the site now occupied by the church of S. Alessio. This is based upon the mention in the catalogues of a dolocenum in the XIII region (Aventinus), and the existence at S. Alessio of three or four inscriptions relating to the worship of Dolichenus. Sig. Lugari controverts this opinion in an article entitled Il Dolocenum della XIII regione, published in the Bull. Comm. Arch. (1893, pp. 223-43). He points out: (1) that out of the twenty-six monuments relating to the worship of Jupiter Dolichenus in Rome, eleven belong surely to the Esquiline, three or four only to the Aventine, two to Trastevere, and the rest dispersed; (2) that two of the inscriptions of the Esquiline were seen by Ficoroni still in situ, in what must have been the tetrastyle of the Dolichenum itself; (3) that the Dolichenian inscriptions on the Aventine, like all the others at S. Alessio, were brought there from elsewhere and give no local indications; (4) that the monks of S. Alessio possessed a castrum on the Esquiline, probably the castrum equitum singularium, and probably the inscriptions came from it; (5) that hence all the Dolichenian inscriptions relate to a temple of Jupiter Dolichenus on the Esquiline, and that there was no such temple on the Aventine.

There remains to explain the *dolocenum* of the catalogues as existing on the Aventine. In regard to the ancient ruins found near S. Alessio, especially during the past two years, there is enough to satisfy the writer that here stood in the second century the *domus* of the Cor-

nelii Repentini, which he suggests may have passed in the third or fourth century to the Cornelii Potiti. In regard to the word dolocenum, the spelling indicates that it has no connection with Jupiter Dolichenus at all. The writer proposes to divide it into two words, dolo from dolium, doli, "wine or oil jars," and cenum, ceni, "a mass of rubbish." In other words, dolocenum would mean a large refuse heap or mound, and such a mound existed from ancient times in this very xIII region of the Aventine, and is now called the Testaccio.

Roman vicars over Sardinia.—L. Cantarelli closes in the Bull. Arch. Comm. for July-Dec., 1893, his articles on Il Vicariato di Roma, by a study of the Roman vicars or praesides in Sardinia and Corsica during the fourth century A. D., when the two islands were separately admintered. The following is their approximate order:

Sardinia: Delphius; Julicus; Valerius Flavianus—all three under Diocletian; 293–305, Aurelius Marcus; 303, Barbarus; 306–12, L. Cornelius Fortunatianus; 308–12, Maximianus; 319, Festus; 319, Bibulenius Restitutus; 307–37, T. Septimius Januarius; 335–37, Flavius Octavianus; 337–40, Munatius Gintianus; 350–361, Flavius Amachius; 350–61, Florianus; 365, Flavius Maximinus; 374, Laodicius; 382, Matronianus; Benignus; Claudius Justinus; Publius Valerius.

Corsica: 303, Barbarus; 318–330, Furius Felix; 364, Flavius Maximianus.

In this paper the period between Diocletian and the occupation by the Vandals is alone treated, the previous epoch having received more attention from Klein and others.

Works of art discovered by the Archæological Commission during 1893 and preserved at the Capitol and in the storehouses.—The following list of the finds of 1893 is summarized from the report of the Roman Committee published in their *Bullettino* (1893, pp. 283–93):

Painting.—Piece of stucco with beautiful decoration. On black ground is a band with red ground, in which is a fronting mask between two ornaments. The mask is bearded and decorated with a crown. A fine piece of work.

Sculpture.—A small bull: part of a bust of a warrior: part of middle of male figure: bearded head from a herm: delicate and very small female head with crown of wheat sheaves: fragment of large bas-relief with female (?) head: fragment of beautifully carved marble vase, among the decorations of which is a cupid about to shoot at a hippogriph, who is clinging to a graceful grape-vine; etc.

Metals.—A gold circlet: a silver ring: among the bronzes is a knob of the handle of a palanquin (?) decorated with two serpent heads.

Terracottas and glass.—Two terracotta antefixes: handle of a large and fine lamp with a bust of Jupiter Serapis on the eagle: a few lamps, lower part of small glass crater.

It is to be deplored that the Commission actually lays its hands

upon so small a proportion of the objects found in Rome.

ROMAN TOPOGRAPHY.—Ch. Hülsen continues his Topographischer Jahresbericht in the Roman Mitheilungen of the German Institute (1893, 3-4). His present review follows after those published in 1889 and 1891 and enumerates all the discoveries and the studies made in the field of Roman topography during the year 1891. The writer often adds to his summaries valuable personal notes and opinions.

SICILY.

NOTO (NEAR).—Sicilian Necropolis.—Some work has been done at a necropolis on Monte Finochito, near Noto, which belongs to the so-called third Sicilian epoch, about which, up to four years ago, nothing whatever was known. The tombs had already been for the most part rifled by early depredators in search of bronze. The relies now found enabled Dr. Orsi to form some idea of the state of civilization at that time, and to fix the date of the necropolis between the ninth and seventh centuries B. c. All the vases here obtained consist of local Greek ceramic work, of imported geometric vases, or else imitations of the latter manufactured on the spot. Amongst the bronzes left are numerous fibulæ of boat shape, and others of a serpent form, with rings of various forms and dimensions, three glazed scarabæi, and two iron knives —F. Halbherr in Athenæum, March 24.

SALEMI.—EARLY CHRISTIAN CHURCH AND SETTLEMENT.—At Salemi in Western Sicily, in the province of Trapani, the remains of a small Christian church of the fourth or, at the latest, fifth century have been found levelled with the ground. Of the two pavements, one beneath the other, owing to restorations, the lower and more ancient one bears Greek inscriptions, while the upper and more recent one, of which very little remains, has some fragmentary inscriptions in Latin. It is to be hoped that further researches will be made on the site of what must have been one of the oldest Christian buildings in the island.

On the site of the discovery of the Christian mosaic pavement, not far from Salemi, excavations were continued by Prof. Salinas, with the result of finding underneath the first a second pavement in mosaic also with votive inscriptions. It was also ascertained that there existed here not only a small church, but a village inhabited in the fifth century of our era.—Athenæum, March 24; Not. di Scavi, 1893, p. 428.

SYRACUSE.—Excavations in the Necropolis of Fusco.—Sig. P. Orsi has begun in his usual scientific and satisfactory manner a thorough exploration of the great necropolis of Syracuse, which had hardly previously been touched except by the hand of the predatory antiquity seeker. The limited amount of money at his disposal made his first campaign a very short one, from December 5, 1892, to January 12, 1893, with an average of but 18 men. He limited his researches to a very small space, doing this thoroughly. How rich his results have been even under such circumstances is proved by the report he has just issued in the Noticie degli Scavi, showing that the necropolis will be invaluable for the study of the archaic Greek period.

The surplus of news has made it necessary to defer until the next issue a full summary of Sig. Orsi's report. We will add here merely a few remarks published on the subject by Prof. Halbherr in the Athenseum of March 24.

"The researches that have now been going on for several years in Eastern Sicily at Syracuse and in the neighborhood still yield a rich harvest of results important for the history of art and for that of the Sicilian and Greek populations once settled in that district. In the large Greek necropolis called Del Fusco, Dr. Orsi at the beginning of last summer resumed his excavations for a short period, directing them to a piece of land teeming with remains of tombs and burials. The tombs, all belonging to the Greek archaic epoch, were made, some by scooping out the rock, others by tiles joined together, while others again consisted of large vases or ossuaries. The grave goods discovered in this campaign, although not great in number, are remarkable, however, for their quality. Some of the vases are exceptionally fine, amongst them being a splendid large and uninjured proto-Corinthian olpe, adorned with friezes of animals. Some of the large ossuaries are of the form of stamnoi of geometric style, resembling the dipylon. Of importance amongst other artistic objects is a small ivory counter, with a very archaic representation of Artemis Theria."

CHRISTIAN ANTIQUITIES.

pp. 372-77), entitled Il panorama di Roma scolpito da Pietro Paolo Olivieri nel 1585, Prof. Lanciani, in using for his purpose part of the monument of Pope Gregory XI, executed in 1585 by Olivieri, speaks also of the very humble original monument of this pope, who died in 1378. He was buried in S. Maria Nova, which had been his titular church, and the simple inscription on his tomb read: Hic requiescit

corpus beati Gregorii Pape XI. Not long ago Forcella saw in this church an inscription, which he afterwards lost sight of, but publishes in vol. II, and of this Lanciani says: "Il lodato Forcella vide 'gettata in un angolo della prima cappella a sinistra di chi entra in chiesa.. una pietra quadrata,' ora andata a male, con la pregevole memoria $\clubsuit Drudus \ de \ T(r)ivio \ h(uius \ op(er)is \ mag(iste)r \ fuit; ma non saprei dire se abbia relazione con l'avello del pontefice."$

The fact that Lanciani does not know whether the Roman artist Drudus de Trivio could or could not have had anything to do with the monument of Gregory XI, erected after 1378, shows what a complete lack of information exists regarding this artist, who flourished nearly 150 years before this time. Some years ago this artist's name was unknown even to the few specialists who had studied the Roman mediaval school. But now notices of him are being found on every hand, and he must have been one of the foremost Roman mosaicists, sculptors and decorators of the middle of the XIII century.

His finest known work is the ciborium over the high altar at the Cathedral of Ferentino, where he signs himself: Magister Drudus de Trivio civis Romanus. This is one of the classic chef-d'œuvres of the school. Another perfect work of its kind was one that he executed in conjunction with another artist, Lucas—the choir-seats of the cathedral of Civita Castellana, which may be dated between 1230

and 1240.

But Comm. Enrico Stevenson, who has accumulated a mass of material concerning the mediæval Roman school, has promised the Journal an article on this artist, and I shall not forestall his remarks, confining myself to calling attention to his date and importance.—
A. L. Frothingham, Jr.

SOME GLASS PAINTERS AND ILLUMINATORS OF THE XV CENTURY.—Sig. Alippio Alippi contributes to the Nuovo Rivista Misena (1894, p. 11) the names of some artists hitherto unknown, according to him, in the fields of manuscript illumination and glass painting in the province of the Marches.

The books of the Opera of S. Ciriaco, now in the Communal Archives of Ancona (Lez. VII, N. XXII, f. 8 rev.) contain this note: "1443, 10 de Magio. Et de dare a di lo detto duc. 2 b. 16 dati a don Domitri gia sagrestano, per resto de aluminare et scrivere uno messale et uno breviale, como appare per una bolletta de mano de mis. Andrea arciprete lo quale lavoro monta duc. 7 bo. 16."

The convent of S. Domenico at Urbino was a great artistic centre. Among others should be noted two makers of colored glass windows: Frate Nicolo di Ancona, who on June 13, 1470, received nine florins and ten bolognini from the Confraternità del Corpo di Cristo at Urbino; and also Frate Matteo, Vicar of S. Domenico, who received on August 20, 1494, from the Convent of S. Francesco, not only some money but fragments, tin and lead, for the making of a window on which was to be the figure of S. Pelingotto (see book B of the Confraternita del C. di C., fol. 63 bis, and Libro di Entroito et esito, 1485–96, of archives of S. Francesco at Urbino).

THE SCULPTOR TURA DA IMOLA IN THE XIV CENTURY.—Innocenzo Fanti calls attention in the Nueva Rivista Misena (1894, pp. 12–19) to the monument of Giovanni Visconti da Oleggio at Fermo by the sculptor Tura or Buonaventura da Imola. Giovanni Visconti was Rector of the Marches and Papal Vicar at Fermo, where he died in 1366, having been previously at Bologna, where he was abhorred for his tyranny and which he had delivered up to the Pope.

In his will, drawn up in 1364, he instituted his wife as his sole heir, and ordered her to bury him in the cathedral: in Ecclesia majori civitatis Formi... in capella costruenda in ipsa ecclesia. The monument was erected and still remains in the new cathedral with the following inscription: Incliti magnificique d d Iohis d Olegio q rectoris marchie et ad xptum evocati mccclx. VI. VIII. octob corp sepulc tumulatur puti. And further down is the artist's signature: Magister Tura de Imola fecit hoc opus.

The monument is of a usual xiv cent. type, consisting of a sarcophagus on which reclines the statue of the defunct in his robes of office, surmounted by a canopy from which hangs rich drapery, the top and front being covered with reliefs.

The sculptor Tura is known to have worked with Giacomo da Fermo on the Papal coats of arm on the fortress of Ancona in 1356-7.

The writer of this note undertakes to attribute to Tura another monument in this region, the altar of the Sacra Spina in Sant' Elpidio a mare, executed in 1371, five years after Visconti's death. Here we see S. Augustine in the midst of his monks in the Gothic arch over the altar. On the front of the body of the monument are five single figures in high relief. But his knowledge is not precise nor broad enough to justify the unverified acceptance of his conjecture.

Lack of space obliges me to postpone until the next issue a large part of the Italian news and the whole of that of the rest of Europe and of America.

A. L. FROTHINGHAM, JR.







DOUBLE-FACED RELIEF FROM NEAR PHALERON.



GROUP FROM THE MOSES PANEL OF GHIBERTI'S SECOND BAPTISTERY GATES.



TERRACOTTA SKETCH FOR THE SAME.